

## MEMORANDUM.

THE principal Municipalities in Bengal returned, during the week ending 3rd March 1888, the birth and death-rates of 19·3 and 21·7 per 1,000 of population, respectively, as opposed to 21·3 and 23·4 per 1,000 in the preceding week ending 25th February, indicating a retrogression in the registration of both births and deaths.

2. These events were returned in the highest proportions by the following Municipalities:—

<i>Births.</i>			<i>Deaths.</i>		
		Ratio per mille.			Ratio per mille.
Beaulah	...	57·8	Suburbs of Calcutta	...	38·7
Comillah	...	42·3	Utterpara	...	37·8
Bhagulpore	...	32·6	Bali	...	31·6
Durbhanga	...	32·3	Comillah	...	30·8
Monghyr	...	30·7	Bardwan	...	29·5
Serampore	...	29·4	Gya	...	30·1
Narainganj	...	49·7	Puri	...	29·4

3. Referring to the specific diseases, there was a sensible abatement in the mortality from the maladies returned under the head of "Other Causes," while the fatal results from other diseases exhibited only fractional differences:—

						Ratio per mille during the weeks ending—	
						3rd March 1888.	25th Feb. 1888.
Cholera	...	...	...	...	...	3·6	3·4
Small-pox	...	...	...	...	...	1	0·3
Fever	...	...	...	...	...	8·7	9·1
Bowel-complaints	...	...	...	...	...	2·9	2·8
Injury	...	...	...	...	...	2	5
Other causes	...	...	...	...	...	6·2	7·6

4. The following Municipalities returned conspicuously high mortality from cholera and fever, and no Municipality exhibited any noticeably high suffering from the other diseases mentioned in the foregoing table, excepting Suburbs of Calcutta, where 10·8 per 1,000 of population died from the unspecified diseases coming under the head of "Other Causes":—

<i>Cholera.</i>			<i>Fever.</i>		
		Ratio per mille.			Ratio per mille.
Narainganj	...	41·4	Purneah	...	24·3
Suburbs of Calcutta	...	9·5	Comillah	...	23·1
Howrah	...	7·4			
Hughli	...	5·4			
Gya	...	4·1			

5. The death-rates according to Sex, Class and Age stood as shown below—

<i>According to Sex.</i>		<i>According to Class.</i>		<i>According to Age.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	22·6	Christians	17·4	Under 1 year	138·9
Females	20·6	Hindus	22·7	1 and under 5 years	25·6
Ratio of male deaths to every 100 female deaths	124	Mahomedans	19·5	5 " 10 "	11·9
				10 " 15 "	13·6
				15 " 20 "	22·5
				20 " 30 "	14·2
				30 " 40 "	13·4
				40 " 50 "	16·9
				50 " 60 "	30·6
				60 years and upwards	46·5

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,

The 19th March 1888.

Offg. Sanitary Commissioner for Bengal.

POPULATION.										BIRTHS.				MORTALITY ACCORDING TO—										SEX.					
		NUMBER OF—		RATIO PER 1,000 OF POPULATION PER ANNUM.		RATIO OF MALE BIRTHS TO EVERY 100 FEMALE BIRTHS.		DEATHS FROM—		DISEASE.		RATIO PER 1,000 OF POPULATION PER ANNUM.		RATIO OF DEATHS PER 1,000 OF POPULATION PER ANNUM IN THE PREVIOUS YEAR.		DEATHS.		RATIO PER 1,000 OF POPULATION PER ANNUM.		Ratio of male deaths to every 100 female deaths.									
		Males.		Females.		Total.		Males.		Females.		Total.		Cholera.		Small-pox.		Measles.		Scarlet-fever.		Dysentery.		All causes.		Males.		Females.	
		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.		Total.	
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A special census of the Europeans in the Darjiling Municipality was recently taken, as the census of this section of the community taken in February 1884, was not reliable owing to the Europeans being at a minimum in that month. The number of the natives remains as before, so it was not necessary to re-census them. The ratios have consequently been calculated on the basis of the census above mentioned, and not on the basis of the census of the Europeans above mentioned, as it was not necessary to re-census them. The ratios have consequently been calculated on the basis of the census above mentioned, and not on the basis of the census of the Europeans above mentioned, as it was not necessary to re-census them.

[illegible]

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,

## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

Statements showing quantities of Goods carried during the month of January 1888.

## ORISSA CIRCLE.

## TALDUNDAL CANAL SYSTEM.

LENGTH OF CANAL OPEN } TALDUNDAL CANAL 27 MILES.  
 } MACHONG " 4 "

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value. Rupees.	Quantity.	Value.	
		Up.	Down.	Total.		Tons.	Rupees.	
15	1. Grain ...	.....	230	230	4,775	230	4,775	
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....	
2	3. Oilseeds ...	.....	26	26	2,208	26	2,208	
.....	4. Salt ...	.....	.....	.....	.....	.....	.....	
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
.....	6. Metal ...	.....	.....	.....	.....	.....	.....	
244	7. Building materials ...	.....	2,941	2,941	3,446	2,165	2,315	
4	8. Miscellaneous ...	5	27	32	600	32	600	
.....	9. Fuel ...	.....	.....	.....	.....	.....	.....	
14 rafts	10. Timber ...	.....	144 No.	144 No.	315	144 No.	315	
32 "	11. Bamboos ...	.....	31,300 "	31,300 "	493	31,300 "	493	
265 & 46 rafts	12. Total ...	5 {	3,227 & 31,444 No.	3,232 & 31,444 No.	{ 11,837 {	2,453 & 31,444 No.	70,706	
47	13. Total of same month last year ...	{	660½ & 17,814 No.	660½ & 17,814 No.	{ 6,097 {	204½ & 17,814 No.	5,473	

	Up.	Down.	Total.		Rs. A. P.
14. Total number of boats plying cargo No.	1	264	265	Total tollage of month—24 + 25 + 26 ...	1,115 1 9
15. Total number of boats plying passenger No.	18	2	20	Total tollage of same month last year ...	238 4 0
15½. Total number of empty boats ... No.	243	25	268		
16. Total registered tonnage, cargo ... Tons.	2,020	5,623	7,643		
17. Total registered tonnage, passenger ... Tons.	563	437	1,000		
18. Ton-mileage ...	30,532	86,967	1,17,499		
19. Estimated value of cargo Ra.	200	10,829	11,029		
20. Number of passengers ...	3	1,564	1,567		
21. Rafts, bamboos No.	.....	31,300	31,300		
22. Do., Timber "	.....	144	144		
23. Estimated value of rafts ...	.....	808	808		
24. Tollage on boats Ra.	221-7-6	856-9-9	1,078-1-3		
25. Compounded tollage on boats ... Ra.	.....	.....	.....		
26. Tollage on rafts "	.....	37-0-6	37-0-6		
27. Total tollage on boats per ton-mile ...	.....	.....	176 pies		
28. Total tollage on rafts per 100 ...	.....	.....	.....		
				1. Balance not recovered on the 1st of the month ...	94 14 6
				2. Tollage per month ...	1,115 1 9
				3. Total ...	1,210 0 3
				4. Amount credited in the accounts of the month ...	897 1 9
				5. Balance due at the end of the month ...	312 14 6

## KENDRAPARA CANAL SYSTEM.

LENGTH OF CANAL OPEN, 75 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupees.	Tons.	
163	1. Grain ...	591	905	1 496	97,930	1,496	97,930
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....
6	3. Oilseeds ...	.....	82	82	8,910	82	8,910
13	4. Salt ...	100	28	128	13,770	128	13,770
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
.....	6. Metal ...	.....	.....	.....	.....	.....	.....
137	7. Building materials ...	14	1,608	1,622	5,870	276	2,020
122	8. Miscellaneous ...	550	482	1,032	2,83,750	1,032	2,83,750
4	9. Fuel ...	49	2	51	150	51	150
29 rafts	10. Timber ...	.....	4,914 No.	4,914 No.	8,990	4,914 No.	8,990
19 "	11. Bamboos ...	.....	45,200 "	45,200 "	830	45,200 "	830
445 & 48 rafts	12. Total ...	1,304	{ 3,107 & 50,114 No.	{ 4,411 & 50,114 No.	{ 4,20,200 }	{ 3,065 & 50,114 No.	{ 4,16,350 }
363 & 27 rafts	13. Total of same month last year	1,537 & 12 No.	1,413 & 115,908 No.	2,950 & 115,920 No.	{ 182,580 }	{ 2,639 & 115,920 No.	{ 1,81,260 }
		Up.	Down.	Total.			Rs. A.
14. Total number of boats ply- ing cargo No.		185	260	445	Total tollage of month— 24+25+26 ...		5,914 5 2
15. Total number of boats ply- ing passenger No.		52	58	110	Total tollage of same month last year ...		4,154 10 5
16. Total number of empty boats No.		213	214	427	Memorandum of Tollage.		
16. Total registered tonnage, cargo Tons.		2,533	4,986	7,519			
17. Total registered tonnage, passenger Tons.		1,314	1,273	2,587			
18. Ton-mileage ...		1,13,733	1,60,230	2,73,963			
19. Estimated value of cargo Rs.		1,82,960	2,27,420	4,10,380			
20. Number of passengers ...		1,721	2,202	3,923			
21. Rafts, bamboos No.		.....	45,200	45,200			
22. Do., timber "		.....	4,914	4,914			
23. Estimated value of rafts ...		.....	9,820	9,820			
24. Tollage on boats Rs.		2,522-5-2	2,980-12-10	5,503-2-0			
25. Compounded tollage on boats ... Rs.		.....	.....	.....			
26. Tollage on rafts "		.....	411-3-2	411-3-2			
27. Total tollage on boats per ton-mile ...		.....	.....	0-0-3-9			
28. Total tollage on rafts per 100 cubic feet ...		.....	.....	0-13-2			
					Rs. A. P		
					1. Balance not recovered on the 1st of the month ...		8,784 4 1
					2. Tollage per month ...		5,914 5 2
					3. Total ...		14,698 9 3
					4. Amount credited in the accounts of the month ...		7,032 14 3
					5. Balance due at the end of the month ...		7,665 11 0

## HIGH LEVEL CANAL, RANGE I.

LENGTH OF CANAL OPEN, 33 MILES.

number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.	
		Quantity—Tons.			Value.	Quantity.		Value.
		Up.	Down.	Total.	Rupies.	Tons.		Rupies.
132	1. Grain ...	562	.....	562	36,710	562	36,710	
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....	
5	3. Oilseeds ...	13	.....	13	1,480	13	1,480	
37	4. Salt ...	.....	150	150	12,510	150	12,510	
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
.....	6. Metal ...	.....	.....	.....	.....	.....	.....	
17	7. Building materials ...	124	9	133	1,200	131	1,060	
98	8. Miscellaneous ...	175	129	304	13,820	304	13,820	
53	9. Fuel ...	499	.....	499	1,400	499	1,400	
44 rafts	10. Timber ...	5,148 No.	.....	5,148 No.	10,200	5,148 No.	10,200	
6 "	11. Bamboos ...	.....	28,200 No.	28,200 "	450	28,200 "	450	
342 & 50 rafts	12. Total ...	{ 1,373 & 5,148 No.	{ 288 & 28,200 No.	{ 1,661 & 33,348 No. }	77,770 {	{ 1,659 & 33,348 No. }	77,630	
258 & 21 rafts	13. Total of same month last year ...	490 & 3,738 No.	522	1,021 & 3,738 No.	47,390	695 & 3,738 No.	47,240	
		Up.	Down.	Total			Rs. A. P.	
14. Total number of boats plying cargo No.		278	64	342	Total tollage of month— 24 + 25 + 26 ...		1,348 0	
15. Total number of boats ply- ing passenger No.		1	4	5	Total tollage of same month last year ...		1,084 3	
16. Total registered tonnage, cargo Tons.		2,449	473	2,922	Memorandum of Tollage.			
17. Total registered tonnage, passenger Tons		5	16	21				
18. Ton-mileage ...		37,924	8,331	46,255			Rs. A. P.	
19. Estimated value of cargo Rs.		41,450	25,690	67,140	1. Balance not recovered on the 1st of the month ...		523 8 9	
20. Number of passengers ...		2	11	13	2. Tollage per-month ...		1,348 0 0	
21. Rafts, bamboos No.		.....	28,200	28,200	3. Total ...		1,871 8 9	
22. Do., timbers "		5,148	.....	5,148	4. Amount credited in the accounts of the month ...		1,338 8 6	
23. Estimated value of rafts ...		10,200	450	10,650	5. Balance due at the end of the month ...		533 0 3	
24. Tollage on boats Rs.		645-15-3	245-5-9	891-5-0				
25. Compounded tollage on boats Rs.		.....	.....	.....				
26. Tollage on rafts "		430-4-0	26-7-0	456-11-0				
27. Total tollage on boats per ton-mile ...		.....	.....	0-0-3-7				
28. Total tollage on rafts per 100 cubic feet ...		.....	.....	1-5-10				



## HIGH LEVEL CANAL, RANGE II.

LENGTH OF CANAL OPEN, 12½ MILES.

Number of boats or rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupees.	Tons.	
72	1. Grain ...	219	5	224	10,303	224	10,303
1	2. Cotton ...	1	.....	1	300	1	300
5	3. Oilseeds ...	.....	16	16	916	16	916
6	4. Salt ...	.....	39½	39½	5,565	39½	5,565
42	5. Piece-goods ...	.....	61½	61½	17,290	61½	17,290
.....	6. Metal ...	.....	.....	.....	.....	.....	.....
.....	7. Building materials ...	.....	.....	.....	.....	.....	.....
40	8. Miscellaneous ...	1	92½	93½	10,445	91	10,229
.....	9. Fuel ...	.....	.....	.....	.....	.....	.....
23 rafts	10. Timber ...	.....	1,278 No.	1,278 No.	3,834	1,278	3,834
26 „	11. Bamboos ...	.....	27,900 „	27,900 „	837	27,900	837
166 & 49 rafts	12. Total ...	221 {	214½ & 29,178 No.	435½ & 29,178 No.	49,490 {	438 & 29,178	49,274 {
118 & 20 rafts	13. Total of same month last year ..	73 {	495 & 3,686 No.	568 & 3,686 No.	29,956 {	231	20,449 {
		Up.	Down.	Total.			
14. Total number of boats ply- ing cargo ... No.		74	92	166			
15. Total number of boats ply- ing passenger ... No.		.....	1	1			
15½. Total number of empty boats ... No.		73	62	135			
16. Total registered tonnage, cargo Tons.		442	429	871			
17. Total registered tonnage, passenger Tons.		.....	3	3	Memorandum of Tollage.		
18. Ton mileage ...		8,552	7,128	15,680			
19. Estimated value of cargo Rs.		10,019	34,800	44,819			
20. Number of passengers ...		68	47	115			
21. Rafts, bamboos No.		.....	27,900	27,900			
22. Do., Timber „		.....	1,278	1,278			
23. Estimated value of rafts ...		.....	4,671	4,671			
24. Tollage on boats Ra.		95-10-6	87-11-3	183-5-9			
25. Compounded tollage on boats ... Rs.		.....	.....	.....			
26. Tollage on rafts „		.....	75-1-6	75-1-6			
27. Total tollage on boats per ton-mile ...		.....	.....	0-0-2-0			
28. Ditto on rafts per 100 cubic feet		.....	.....	0-4-1			
					Rs. A. P.		
					Total tollage of month— 24+25+26 ...		
					258 7 3		
					Total tollage of same month last year ...		
					264 2 0		
					Rs.		
					1. Balance not recovered on the 1st of the month ...		
					2. Tollage per month ...		
					258 7		
					3. Total ...		
					258 7		
					4. Amount credited in the accounts of the month ...		
					255 7		
					5. Balance due at the end of the month ...		
					2 0		

## HIGH LEVEL CANAL, RANGE III.

LENGTH OF CANAL OPEN, 19 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.		Tons.	Rupces.	
39	1. Grain ...	97	.....	97	5,029	97	5,029	
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....	
8	3. Oilseeds ...	.....	12	12	1,386	12	1,386	
5	4. Salt ...	13	4½	17½	2,044	17½	2,044	
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
.....	6. Metal ...	.....	.....	.....	.....	.....	.....	
.....	7. Building materials ...	.....	.....	.....	.....	.....	.....	
5	8. Miscellaneous ...	.....	21	21	2,883	19½	2,888	
.....	9. Fuel ...	.....	.....	.....	.....	.....	.....	
8 rafts	10. Timber ...	.....	92 No.	92 No.	154	92 No.	154	
.....	11. Bamboos ...	.....	.....	.....	.....	.....	.....	
52 & 8 rafts	12. Total ...	110	{ 37½ & 92 No.	{ 147½ & 92 No.	{ 11,506 & 92 No.	{ 146 & 92 No.	{ 11,501 & 92 No.	
68 & 3 rafts	13. Total of same month last year	33	419	452	6,683	67	5,544	
		Up.	Down.	Total.				Rs. A. P.
14.	Total number of boats plying cargo No.	43	9	52	Total tollage of month—24 + 25 + 26 ...			66 1 3
15.	Total number of boats plying passenger No.	.....	1	1	Total tollage of same month last year ...			194 7 0
15½.	Total number of empty boats No.	10	39	49				
16.	Total registered tonnage, cargo Tons	220	75	295	Memorandum of Tollage.			
17.	Total registered tonnage, passenger Tons	.....	3	3				Rs. A. P.
18.	Top-mileage ...	147	1,160	1,307	1. Balance not recovered on the 1st of the month ...			.....
19.	Estimated value of cargo Ra.	6,545	4,807	11,352				
20.	Number of passengers ...	63	55	118	2. Tollage per month ...			66 1 3
21.	Rafts, bamboos c. ft.	.....	.....	.....				
22.	Do., Timbers No.	.....	92	92				
23.	Estimated value of rafts ...	.....	154	154	3. Total ...			66 1 3
24.	Tollage on boats Ra.	41-1-3	21-9-0	62-10-3				
25.	Compounded tollage on boats Ra.	.....	.....	.....	4. Amount credited in the accounts of the month ...			66 1 3
26.	Tollage on rafts ..	.....	3-7-0	3-7-0				
27.	Total tollage on boats per ton-mile ...	.....	.....	0-0-2				
28.	Total tollage on rafts per 100 cubic feet ...	.....	.....	3-11-0	5. Balance due at the end of the month ...			.....



## SOUTH-WESTERN CIRCLE.

## MIDNAPORE CANAL.

LENGTH OF CANAL OPEN, 53 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
1,019	1. Grain ...	7,260	371	7,631	3,09,006	7,631	3,09,006	
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....	
13	3. Oilseeds ...	14	67	81	9,432	81	9,432	
72	4. Salt ...	.....	664	664	53,564	664	53,564	
8	5. Piece-goods ...	6	1	7	17,850	7	17,850	
6	6. Metal ...	5	29	34	11,170	34	11,170	
19	7. Building materials ...	155	14	169	472	133	222	
312	8. Miscellaneous ...	654	270	924	6,14,622	924	6,14,622	
18	9. Fuel ...	49	276	325	2,604	325	2,604	
51 rafts	10. Timber ...	10,935 c. ft.	598 c. ft.	11,533 c. ft.	5,757	11,533 c. ft.	5,757	
8 "	11. Bamboos ...	8,150 "	.....	8,150 "	652	8,150 "	652	
1,467 & 59 rafts	12. Total ...	{ 8,143 & 19,085 c. ft.	{ 1,692 & 598 c. ft.	{ 9,835 & 19,683 c. ft.	{ 10,25,129 & 19,683 c. ft.	{ 9,799 & 19,683 c. ft.	{ 10,24,879 & 19,683 c. ft.	
1,386 & 76 rafts	13. Total of same month last year	{ 6,845 & 19,074 c. ft.	{ 2,074 & 916 c. ft.	{ 8,919 & 19,990 c. ft.	{ 5,15,176 & 19,990 c. ft.	{ 8,919 & 19,990 c. ft.	{ 5,15,176 & 19,990 c. ft.	
		Up.	Down.	Total.				Rs. A
14.	Total number of boats plying cargo No.	1,189	278	1,467	Total tollage of month— 24+25+26 ...			10,713 11
15.	Total number of boats plying passenger No.	510	564	1,074	Total tollage of same month last year ...			9,898 1
15½.	Total number of empty boats ... No.	549	921	1,470				
16.	Total registered tonnage, cargo ... Tons	15,972	3,725	19,697	Memorandum of Tollage.			
17.	Total registered tonnage, passenger ... Tons	2,915	2,575	5,490				
17½.	Total registered tonnage, empty ... Tons	2,344	4,127	6,471				Rs. A. 1
18.	Ton-mileage ...	4,84,094	2,40,043	7,24,137	1. Balance not recovered on the 1st of the month ...			4,437 7 1
19.	Estimated value of cargo Rs.	8,54,620	1,64,100	10,18,720	2. Tollage per month ...			10,713 11
20.	Number of passengers ...	5,498	6,504	12,002				
21.	Rafts, bamboos c. ft.	8,150	.....	8,150				
22.	Do., bullahs "	10,935	598	11,533	3. Total ...			15,151 3
23.	Estimated value of rafts ...	5,022	1,387	6,409				
24.	Tollage on boats Ra.	7,508-3-6	3,630-12-3	10,538-15-9				
25.	Compounded tollage on boats ... Ra.	.....	.....	.....				
26.	Tollage on rafts "	167-7-6	7-4-6	174-12-0	4. Amount paid into treasury during the month ...			11,175 11
27.	Total tollage on boats per ton-mile Pie	.....	.....	0-0-2-8				
28.	Total tollage on rafts per 100 cubic feet Ra.	.....	.....	0-14-2	5. Balance due at the end of the month ...			2,975 2

HIDGELLEE TIDAL CANAL.

LENGTH OF CANAL OPEN, 29 MILES.

Number of boats or rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.	
		Quantity—Tons.			Value.	Quantity.	Value.
		Up.	Down.	Total.	Rupess.	Tons.	Rupess.
	1. Grain ...						
	2. Cotton ...						
	3. Oilseeds ...						
	4. Salt ...						
	5. Piece-goods ...						
	6. Metal ...						
	7. Building materials ...						
	8. Miscellaneous ...						
	9. Fuel ...						
	10. Timber ...						
	11. Bamboos ...						
	12. Total ...						
1,249 & 24 raft.	13. Total of same month last year.	2,612 & 1,960 a ft.	533 & 1,363 c. ft.	3,145 & 3,323 c. ft.	1,69,878	3,145 & 3,323 c. ft.	1,69,878
Canal closed for silt excavation for							
		Up.	Down.	Total.	Rs. A. P.		
14.	Total number of boats plying cargo No.				Total tollage of month— 24 + 25 + 26 ...		
15.	Total number of boats plying passenger No.				Total tollage of same month last year		
16.	Total registered tonnage, cargo ...				Memorandum of Tollage.		
17.	Total registered tonnage, passenger ...						
18.	Ton-mileage ...				Ra. A. P.		
19.	Estimated value of cargo Ra.				1. Balance not recovered on the 1st of the month ...		
20.	Number of passengers ...				1,515 13 3		
21.	Rafts, bamboos c. ft.				2. Tollage per month ...		
22.	Do., bullahs "				.....		
23.	Estimated value of rafts ...				3. Total ...		
24.	Tollage on boats Ra.				1,515 13 3		
25.	Compounded tollage on boats ... Ra.				4. Amount paid into treasury during the month ...		
26.	Tollage on rafts "				1,495 7 0		
27.	Total tollage on boats per ton-mile ...				5. Balance due at the end of the month ...		
28.	Total tollage on rafts per 100 cu. ft. ...				20 6 3		

## SONE CIRCLE.

## PATNA CANAL SYSTEM.

LENGTH OF CANAL OPEN, 86½ MILES.

DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
	Quantity—Tons.			Value.	Quantity.	Value.	
	Up.	Down.	Total.		Tons.	Rupees.	
1. Grain ...	14	2	16	1,081	16	1,081	
2. Cotton ...	.....	.....	.....	.....	.....	.....	
10 3. Oilseeds ...	1	110	111	10,456	111	10,456	
2 4. Salt ...	43	.....	43	2,742	43	2,742	
18 5. Piece-goods ...	151	1	152	35,370	152	35,370	
6. Metal ...	4	3	7	34,530	7	34,530	
98 7. Building materials	155	728	883	7,200	241	1,108	
67 8. Miscellaneous ...	216	340	556	63,508	451	61,396	
9. Fuel { boats	.....	9	9	50	9	50	
1 rafts	.....	47	47	97	47	97	
10. Timber { boats	2	.....	2	195	2	195	
1 rafts	.....	459	459	2,765	459	2,765	
11. Bamboos { boats	4	.....	4	180	4	180	
1 rafts	3	758	761	25,638	761	25,638	
197 12. Total ...	593	2,457	3,050	1,83,902	2,303	1,75,608	
162 13. Total of same month last year	337	1,556	1,893	1,17,168	1,615	1,16,228	
						Rs. A. P.	
14. Total number of boats plying cargo No.	61	136	197	Total tollage of month—			
15. Total number of boats plying passenger No.	4	7	11	24 + 25 + 26 ...		2,245 14 1	
15½. Total number of empty boats No.	103	20	123	Total tollage of same month last year ...		1,629 6 6	
16. Total registered tonnage, cargo Tons	852	2,022	2,874				
17. Total registered tonnage, passenger Tons	108	145	253				
17½. Total registered tonnage, empty boats Tons	453	79	532	Memorandum of Tollage.			
18. Ton-mileage ...	73,004	1,93,708	2,67,612			Rs. A. P.	
19. Estimated value of cargo Rs.	55,159	1,01,243	1,55,402	1. Balance not recovered on the 1st of the month ...		824 11 6	
20. Number of passengers No.	291	315½	606½	2. Tollage per month ...		2,245 14 1	
21. Rafts, bamboos c. ft.	450	1,13,664	1,14,114				
22. Do., bullocks ..	.....	37,897	37,897				
23. Estimated value of rafts Rs.	1,050	27,450	28,500	3. Total ...		2,570 2 1	
24. Tollage on boats ..	581-7-10	929-9-3	1,511-1-1				
25. Compounded tollage on boats Rs.	75-0-0	75-0-0	150-0-0	4. Amount credited in the accounts of the month ...		1,750 11	
26. Tollage on rafts ..	1 6-6	583-6-6	584 13-0				
27. Total tollage on boats per ton-mile ...	.....	.....	0-0-1-1	5. Balance due at the end of the month ...		819 14	
28. Total tollage on rafts per 100 cubic feet ...	.....	.....	0-6-1				

## ARRAH CANAL SYSTEM.

LENGTH OF CANAL OPEN, 65 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupess.	Tons.	
7	1. Grain ...	60	25	85	5,984	85	5,984
.....	2. Cotton ...	1	.....	1	1,464	1	1,464
5	3. Oilseeds ...	1	24	25	1,880	25	1,880
9	4. Salt ...	87	.....	87	8,300	87	8,300
3	5. Piece-goods ...	30	1	31	29,996	31	29,996
8	6. Metal ...	63	1	64	57,187	3	48,687
8	7. Building materials ...	27	31	58	506	14	66
53	8. Miscellaneous ...	40	279	319	16,970	144	16,826
15	9. Fuel ...	152	54	206	1,668	112	1,216
2	10. Timber ...	6	6	12	887	6	462
Rafts {	11. Firewood ...	.....	101	101	330	101	330
	Bullahs ...	.....	1,074	1,074	3,807	1,074	3,807
	Bamboos ...	.....	110	110	1,218	110	1,218
110	12. Total ...	467	1,706	2,173	1,30,197	1,793	1,20,236
142	13. Total of same month last year	430	1,738	2,168	1,04,864	1,966	1,04,548
		Up	Down.	Total.			Rs. A. P.
14. Total number of boats plying cargo No.		41	69	110	Total tollage of month—24 + 25 + 26 ...		1,331 8 0
15. Total number of boats plying passenger No.		2	3	5			
15½. Total number of empty boats ...		42	15	57	Total tollage of same month last year ...		1,285 3 0
16. Total registered tonnage, cargo ...		586	665	1,251	Memorandum of Tollage.		
17. Total registered tonnage, passenger ...		77	68	145			
17½. Total registered tonnage, empty ...		127	52	179			
18. Ton-mileage ...		35,137	31,392	66,529			Rs. A. P.
19. Estimated value of cargo Rs.		1,95,776	19,066	1,24,842	1. Balance not recovered on the 1st of the month ...		165 9 9
20. Number of passengers ...		1,002	877	1,879	2. Tollage per month ...		1,331 8 0
21. Rafts, bamboos o. ft.		.....	16,498	16,498			
22. Do., bullahs "		.....	80,586	80,586			
22½. Do., firewood "		.....	7,600	7,600			
23. Estimated value of rafts Rs.		.....	5,355	5,355	3. Total ...		1,497 1 9
24. Tollage on boats "		204-13-9	195-15-6	400-13-3			
25. Compounded tollage on boats Rs.		356-0-0	356-0-0	712-0-0	4. Amount credited in the accounts of the month ...		1,300 6 6
26. Tollage on rafts "		.....	218-10-9	218-10-9			
27. Total tollage on boats per ton-mile ...		.....	.....	0-0-3			
28. Total tollage on rafts per 100 cubic feet ...		.....	.....	0-3-4	5. Balance due at the end of the month ...		196 11 3

## BUKAR CANAL SYSTEM.

LENGTH OF CANAL OPEN, 67 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupces.	Tons.	
2	1. Grain ...	1	17	18	1,971	18	1,971
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....
1	3. Oilseeds ...	.....	10	10	842	10	842
.....	4. Salt ...	1	.....	1	168	1	168
.....	5. Piece-goods ...	1	.....	1	2,145	1	2,145
.....	6. Metal ...	2	1	3	1,730	3	1,730
29	7. Building materials ...	1	381	382	14,403	1	128
15	8. Miscellaneous ...	11	183	194	17,613	194	17,613
.....	9. Fuel ...	.....	.....	.....	.....	.....	.....
Rafts	10. Timber ...	.....	198	198	2,460	198	2,460
	11. Bamboos ...	.....	272	272	4,890	272	4,890
47	12. Total ...	17	1,062	1,079	46,922	698	31,947
110	13. Total of same month last year	45	1,693	1,738	1,02,854	1,153	90,954
		Up.	Down.	Total.			Rs. A. P.
14.	Total number of boats plying cargo No.	.....	47	47	Total tollage of month—24 + 25 + 26 ...		672 14 3
15.	Total number of boats plying passenger No.	11	10	21			
15½.	Total number of empty boats No.	40	6	46			
16.	Total registered tonnage, cargo Tons	17	1,255	1,272	Total tollage of same month last year ...		905 1 3
17.	Total registered tonnage, passenger Tons	252	247	499			
17½.	Total registered tonnage, empty Tons	161	28	189			
18.	Ton-mileage ...	5,963	29,628	29,591	Memorandum of Tollage.		
19.	Estimated value of cargo Rs.	5,246	33,626	38,872			Rs. A. P.
20.	Number of passengers ..	598½	592	1,190½	1. Balance not recovered on the 1st of the month ...		31 0 3
21.	Rafts, bamboos c. ft.	.....	40,750	40,750			
22.	Do., bullocks ..	.....	14,901	14,901	2. Tollage per month ...		672 14 3
23.	Estimated value of rafts Rs.	.....	7,350	7,350			
24.	Tollage on boats ..	28-13-9	180-7-6	209-5-3	3. Total ...		704 14 6
25.	Compounded tollage on boats Rs.	75-0-0	171-0-0	246-0-0			
25.	Tollage on rafts ..	.....	218-9-0	218-9-0	4. Amount credited in the accounts of the month ...		493 1 4
27.	Total tollage on boats per ton-mile ...	.....	.....	0-0-2½			
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	0-6-3	5. Balance due at the end of the month ...		12 18 9

CANAL	TRAFFIC, 1887-88.						TRAFFIC, 1886-87.						REMARKS.
	During the month.			To end of the month.			During the month.			To end of the month.			
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	
<i>Orissa Circle.</i>													
Taldunda Canal System ...	1,115	1	9	4,768	10	9	238	4	0	1,738	15	4	
Kendrapara Canal System	5,914	5	2	36,081	2	2	4,151	10	5	30,487	8	0	
High Level, Range I ...	1,348	0	0	6,335	9	6	1,084	3	6	5,674	14	6	
Ditto, " II ...	258	7	3	2,924	10	3	264	2	0	2,707	2	6	
Ditto, " III ...	66	1	3	899	14	0	191	7	0	1,664	15	6	
Total Orissa Circle ...	8,701	15	5	51,009	14	8	5,935	10	11	42,273	7	10	
<i>South-Western Circle.</i>													
Midnapore Canal ...	10,713	11	9	1,01,001	8	9	9,898	1	9	91,028	4	9	
Hidgelleo Tidal Canal ...	.....			40,016	14	■	2,584	0	9	43,191	2	0	
Total South-Western Circle	10,713	11	9	1,41,048	6	9	12,482	2	6	1,34,219	6	9	
<i>Sone Circle.</i>													
Patna Canal System ...	2,245	14	1	21,549	5	7	1,629	6	6	18,512	11	0	
Arrah ditto ...	1,331	8	0	12,633	7	0	1,285	3	0	15,350	0	4	
Buxar ditto ...	673	14	3	6,225	8	11	905	1	3	6,778	12	7	
Total Sone Circle ...	4,251	4	4	40,408	5	6	3,819	10	9	40,641	7	11	
GRAND TOTAL ...	23,666	15	6	2,32,166	10	11	22,237	8	2	2,17,134	6	6	

CANAL.	TRAFFIC, 1887-88.									TRAFFIC, 1886-87.					
	During the month.			To end of the month.			During the month.			To end of the month.					
	Passen- gers.	Goods.	Total receipts.	Passen- gers.	Goods.	Total receipts.	Passen- gers.	Goods.	Total receipts.	Passen- gers.	Goods.	Total receipts.			
Orissa Circle.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.			
High Level ...	189	491	539 0 0	2,888	4,707	3,781 7 3	167	243	171 10 11	6,948	12,600	7,750 0 2			
Total Orissa Circle ...	189	491	539 0 0	2,888	4,707	3,781 7 3	167	243	171 10 11	6,948	12,600	7,750 0 2			

CANAL.	EARNINGS, 1887-88.			EARNINGS, 1886-87.			REMARKS.		
	During the month.	To end of the month.		During the month.	To end of the month.				
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals...	9,091	9	2	54,794	5	11	6,107	5	10
Midnapore Canal	10,713	11	0	1,01,001	8	9	9,898	1	9
Hidgellee Tidal Canal	.....			40,046	14	0	2,584	0	9
Some Canals ...	4,251	4	4	40,408	5	6	43,191	2	0
Total	24,056	9	3	2,36,251	2	2	40,641	7	11
							22,409	3	1
							2,21,884	6	8

OSLOTTA,  
The 20th March 1988



## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 17th March 1888, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 17TH MARCH 1888.			WEEK ENDING SATURDAY, THE 10TH MARCH 1887.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	1,080	2,30,315	4,350	904	2,40,135	3,965
Jute ...	50	45,200	776	83	19,225	338
Firewood ...	136	67,147	1,043	110	59,775	838
Other articles ...	892	2,35,942	3,453	946	2,71,850	4,271
Total ...	2,158	5,78,604	9,622	1,993	5,90,985	9,412

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 10th March 1888, on 1,513½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	270,816*	3,33,408 10 6*	27,41,293 10	0,09,302 0 8	21,440 14 0	10,24,150 1 0	71,351½	103,073½	174,425½
Or per mile of railway ...	220 4 0	220 4 0	220 4 0	412 2 5	14 2 7	676 0 0	...	...	...
For previous 9 weeks of half-year ...	2,431,254	28,02,983 8 0	2,51,30,925 10	60,74,391 5 3	1,00,908 0 4	91,07,264 10 2	690,408	958,157½	1,648,565½
Total for 10 weeks ...	2,702,070	32,26,391 15 0	2,78,72,218 20	67,48,693 14 3	2,21,348 14 4	1,04,01,514 11 2	761,810	1,061,231	1,823,041
COMPARISON.									
Total for corresponding week of previous year ...	246,567	2,71,447 8 8	24,69,408 20	0,23,237 11 1	17,050 2 4	9,10,735 5 1	64,087	113,523	177,610
Per mile of railway corresponding week of previous year ...	179 2 9	179 2 9	179 2 9	410 11 6	11 4 1	601 2 4	...	...	...
Total to corresponding date of previous year ...	2,613,840	29,51,035 2 8	2,63,20,338 10	67,87,035 0 11	1,85,080 8 10	99,24,361 5 0	651,037	1,116,303	1,767,340

\* The increase in coaching traffic is partly due to the running of Troop extra trains, and partly to "Baroomu" bathing festival.

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
1,513	9,10,735	601	1,513½	10,24,150	677	1,515	4,02,03,863	695	1,516½	4,36,64,139	588	...	5,30,720

## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 10th March 1888, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	10,917	9,011 10 0	24,485 0	1,014 7 0	21 9 0	11,780 10 0	1,442	552	2,394
Or per mile of railway ...	296½	168 0 7	427 20	20 7 7	0 15 3	195 7 5	...	...	...
For previous 9 weeks of half-year ...	123,904	66,844 11 6	2,84,319 0	18,331 7 0	383 6 0	85,558 8 0	10,444	5,230	21,774
Total for 10 weeks ...	140,824	75,855 8 0	3,08,772 0	19,845 14 0	416 15 0	96,739 2 0	18,388	5,862	24,250
COMPARISON.									
Total for corresponding week of previous year ...	17,236	10,010 4 7	75,223 20	3,274 14 0	15 9 3	13,900 11 30	1,785	...	2,669
Per mile of railway corresponding week of previous year ...	301½	175 0 1	1,315 0	57 4 1	0 4 4	232 8 6	...	...	...
Total to corresponding date of previous year ...	139,978	75,273 8 10	2,83,368 20	81,741 0 3	640 12 9	1,07,553 12 10	17,545	8,590	26,135

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
57½	2,394	296	57½	2,394	296	57½	2,394	296	57½	2,394	296	...	2,394

## DILDARNAGAR-GHAZIPUR STATE RAILWAY.

Approximate Return of Traffic for week ended 10th March 1886, on 12 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,830	444 8 0	23,090 0	712 15 0	9 12 0	1,317 1 0	341 1	153	494
Or per mile of railway ...		41 3 2		59 0 7	0 13 0	101 0 0			
For previous 9 weeks of half-year ...	20,064	4,396 14 0	1,91,023 0	4,168 14 0	81 8 0	8,616 18 0	3,051	1,399	4,450
Total for 10 weeks ...	22,894	4,841 4 0	2,14,113 0	4,887 13 0	93 18 0	9,933 0 0	3,392	1,552	4,944
COMPARISON.									
Total for corresponding week of previous year ...	2,634	420 3 0	17,239 30	380 1 0	14 12 0	630 0 0	352	141	493
Per mile of railway corresponding week of previous year ...		35 8 4		32 0 8	1 3 8	69 2 0			
Total to corresponding date of previous year ...	50,147 1	5,954 10 8	2,08,637 20	5,089 6 0	73 15 8	10,917 15 11	3,472	1,520	5,001

Approximate Statement of gross receipts of the Dildarnagar-Ghazipur State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 10TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.			Rs.			Rs.			Rs.		Rs.	
12	830	69	12	1,317	101	12	45,353	77	12	45,391	77	33	

## SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 10th March 1888, on 74 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	6,412	4,780 8 0	69,619 30	3,064 15 0	168 8 0	8,033 10 0	609	1,546 1	2,155
Or per mile of railway ...		64 14 7		41 4 8	2 3 11	110 0 12			
For previous 9 weeks of half-year ...	43,686	33,915 18 0	8,10,232 30	38,325 10 0	1,079 1 0	73,440 10 0	5,934	14,447	20,381
Total for 10 weeks ...	50,098	37,700 7 0	8,79,851 20	41,390 0 0	1,247 4 0	82,880 4 0	6,543	16,004	22,547
COMPARISON.									
Total for corresponding week of previous year ...	4,870 1	3,815 8 11	1,20,582 10	4,384 0 0	140 0 0	8,339 13 11	734	1,363	2,117
Per mile of railway corresponding week of previous year ...		51 0 3		59 0 11	1 13 11	111 7 11			
Total to corresponding date of previous year ...	57,159 1	43,234 0 8	10,97,841 0	53,941 6 6	1,008 7 9	97,223 16 8	7,003	14,026	21,029

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.			Rs.			Rs.			Rs.		Rs.	
74 1	8,340	111	74 1	8,034	110	74 1	3,32,818	104	74 1	4,16,081	114	84,263	

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 10th March 1888, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	10,974	5,461 3 0	10,046 20	347 8 0	0 0 0	5,509 11 0	881	68	968
Or per mile of railway	...	244 15 11	...	15 9 11	0 4 4	200 15 2	...	...	...
For previous 8 weeks of half-year	106,106	47,051 7 8	79,106 10	2,644 3 0	58 13 0	50,661 7 0	8,151	718	8,869
Total for 8 weeks	201,170	53,462 10 0	89,192 30	2,991 11 0	61 13 0	56,456 2 0	9,012	800	9,812
COMPARISON.									
Total for corresponding week of previous year	21,951	5,814 11 11	9,891 0	323 15 8	0 15 9	6,145 10 8	913	56	969
Per mile of railway corresponding week of previous year	...	261 5 5	...	14 8 17	0 5 0	278 3 4	...	...	...
Total to corresponding date of previous year	206,703	43,151 0 3	80,574 30	2,749 8 0	68 13 0	55,963 4 3	9,003	470	10,149

Approximate Statement of gross receipts of the Tarkeessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 12th MARCH 1887.			RECEIPTS FOR WEEK ENDING 10th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1884 TO 12th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 10th MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
■	6,146	276	22½	5,805	261	22½	2,82,672	213	22½	2,40,844	120	16,872	...

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., Dacca, K. and D., and ANNUM-BENAR SECTIONS.)

Approximate Return of Traffic for week ended 3rd March 1888 on 676 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including Steam-boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	100,324*	82,760 0 0	4,86,065 0	83,567 0 0	13,065 0 0	1,90,298 0 0	23,747	55,053	78,800
Or per mile of railway	220	123 0 0	724 0	124 0 0	3 0 0	280 0 0	...	...	...
For previous 8 weeks of half-year	603,504	5,98,261 0 0	46,85,010	7,94,761 0 0	1,22,097 0 0	14,86,030 0 0	170,816	1,78,413	2,15,089
Total for 8 weeks	1,188,028	6,51,017 0 0	51,91,066	8,78,328 0 0	1,36,592 0 0	10,65,937 0 0	2,07,501	2,63,895	4,04,446
COMPARISON.									
Total for corresponding week of previous year	175,580*	73,774 0 0	4,44,711 0	74,313 0 0	13,933 0 0	1,61,914 0 0	20,164	18,463	38,627
Per mile of railway corresponding period of previous year	206	122 0 0	747 0	123 0 0	4 0 0	240 0 0	...	...	...
Total to corresponding date of previous year	1,328,841	6,14,478 0 0	53,80,465	8,08,432 0 0	1,21,348 0 0	15,41,253 0 0	170,781	1,66,068	376,449

\* Includes 59,000 monthly tickets against 52,000 in the corresponding period of previous year.  
† Excluding Steam-boat earnings.

FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 5th MARCH 1887.			RECEIPTS FOR WEEK ENDING 2nd MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1886 TO 5th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 3rd MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
■	1,31,844	207	■	1,30,338	197	608	78,40,128	170	647	*89,64,463	289	11,16,140	...

\* Audited up to 31st December 1887.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 3rd March 1888, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mrs. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	33,911	14,160 0 0	28,600 0	5,418 0 0	120 0 0	16,680 0 0	8,507	1,730	8,237
Or per mile of railway	272	81 0 0	464 0	43 0 0	1 0 0	135 0 0	.....	.....	.....
For previous 8 weeks of half-year	100,273	70,535 0 0	2,71,703 0	31,047 0 0	433 0 0	1,05,915 0 0	27,406	13,674	41,080
Total for 9 weeks	224,243	80,685 0 0	4,29,703 0	40,357 0 0	553 0 0	1,21,595 0 0	31,875	15,404	46,973
COMPARISON.									
Total for corresponding week of previous year	33,117	4,410 0 0	37,316 0	2,312 0 0	67 0 0	4,798 0 0	3,483	1,737	5,220
Per mile of railway corresponding period of previous year	265	33 0 0	298 0	18 0 0	1 0 0	54 0 0	.....	.....	.....
Total to corresponding date of previous year	233,198	78,383 0 0	2,68,374 0	17,678 0 0	311 0 0	90,522 0 0	33,015	14,807	47,912

\* In this period there was a write-back 5,511 on account of Postal Subsidy the item having been disputed by that Department, but subsequently admitted and adjusted in June 1887.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 3RD MARCH 1887.			RECEIPTS FOR WEEK ENDING 3RD MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 5TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 3RD MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
121	0,708	54	125	15,680	125	125	5,25,512	88	125	0,15,500*	103	90,084	.....

\* Audited up to week ending 31st December 1887.

## DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 3rd March 1888, on 111 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mrs. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	13,455	4,274 0 0	8,308 0	1,051 0 0	50 0 0	5,375 0 0	2,141	903	3,104
Or per mile of railway	121	54 0 0	98 0	12 0 0	1 0 0	63 0 0	.....	.....	.....
For previous 8 weeks of half-year	100,536	41,606 0 0	1,55,014 0	13,744 0 0	589 0 0	36,009 0 0	16,623	7,885	24,178
Total for 9 weeks	122,990	45,879 0 0	1,63,412 0	14,795 0 0	618 0 0	41,363 0 0	16,704	8,618	27,318
COMPARISON.									
Total for corresponding week of previous year	13,010	5,113 0 0	9,447 0	1,397 0 0	84 0 0	6,574 0 0	2,418	612	3,030
Per mile of railway corresponding period of previous year	108	59 0 0	114 0	16 0 0	1 0 0	76 0 0	.....	.....	.....
Total to corresponding date of previous year	115,809	41,585 0 0	2,14,567 0	18,323 0 0	1,968 0 0	62,866 0 0	10,406	10,004	30,400

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 5TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 3RD MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 5TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 3RD MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
88	0,574	76	88	5,275	63	88	2,37,079	88	88	2,37,755*	70	30,072	.....

\* Audited up to week ending 31st December 1887.

## ASSAM-BEHAR STATE RAILWAY.

(PURNIAH SECTION.)

Approximate Return of Traffic for week ended 3rd March 1888, on 39 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	8,388	795 0 0	20,124 0	2,314 4 0	15 0 0	2,329 4 0	540	540	1,080
Or per mile of railway ...	61	20 0 0	516 0	59 6 0		59 6 0			
For previous 9 weeks of half-year ...	24,296	8,686 0 0	11,60,630 0	15,382 0 0	119 0 0	15,501 0 0	4,304	4,304	8,608
Total for 9 weeks ...	26,681	9,381 0 0	1,26,754 0	17,996 0 0	134 0 0	18,130 0 0	4,844	4,844	9,688
COMPARISON.									
Total for corresponding week of previous year ...	8,388	795 0 0	20,124 0	2,314 4 0	15 0 0	2,329 4 0	540	540	1,080
For mile of railway corresponding period of previous year ...	61	20 0 0	516 0	59 6 0		59 6 0			
Total to corresponding date of previous year ...	24,296	8,686 0 0	11,60,630 0	15,382 0 0	119 0 0	15,501 0 0	4,304	4,304	8,608

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Assam-Bihar State Railway.

RECEIPTS FOR WEEK ENDING 3RD MARCH 1887.			RECEIPTS FOR WEEK ENDING 3RD MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 5TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 3RD MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
				Rs.	Rs.					Rs.	Rs.	Rs.	
			30	2,994	77				80	2,14,250*	61	1,14,250	

\* Audited up to week ending 31st December 1887.

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for the week ending 10th March 1888, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	3,888	1,879 10 0	24,588 0	1,501 1 0	17 12 0	2,398 7 9	600	254	754
Or per mile of railway ...	145	50 10 0	913 0	58 6 0	0 10 0	100 10 0			
For previous 9 weeks of half-year ...	20,640	11,027 5 3	1,63,302 0	2,139 15 0	276 4 0	10,415 9 3	4,693	3,710½	8,403½
Total for 10 weeks ...	24,528	12,907 0 0	1,87,890 0	2,731 0 0	293 0 0	13,194 0 0	5,093	3,964½	9,057½
COMPARISON.									
Total for corresponding week of previous year ...	3,888	1,879 10 0	24,588 0	1,501 1 0	17 12 0	2,398 7 9	600	254	754
For mile of railway corresponding week of previous year ...	145	50 10 0	913 0	58 6 0	0 10 0	100 10 0			
Total to corresponding date of previous year ...	21,788½	11,760 15 0	1,42,020 30	2,086 9 0	230 8 6	10,078 0 0	5,162	3,664	8,826

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 12TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
27½	1,800	73	27½	2,000	110	27½	72,190	62	27½	90,880	66	6,320	10,120



## TIRHOO STATE RAILWAY.

Approximate Return of Traffic for the week ending 10th March 1888, on 259 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coachings receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 259 miles open	45,897	Rs. 18,462 0 0	Mds. 1,07,898 0	Rs. 19,829 0 0	Rs. 3,448 0 0	Rs. 30,339 0 0	0,289	7,103	15,390
Or per mile of railway	169	63 10 0	704 0	75 13 0	3 4 0	142 11 0	...	...	...
For previous 9 weeks of half-year	389,133	1,57,917 0 0	18,33,790 0	1,93,758 0 0	33,314 0 0	3,94,298 0 0	80,026	77,948	158,974
Total for 10 weeks	435,030	1,76,389 0 0	20,41,588 0	2,13,587 0 0	36,728 0 0	4,21,448 0 0	80,315	84,956	164,271
COMPARISON.									
Total for corresponding week of previous year on 240 miles open	50,091	Rs. 12,000 13 0	Mds. 1,38,753 0	Rs. 20,383 11 0	Rs. 3,600 4 0	Rs. 35,973 11 6	5,539	6,029	11,568
Per mile of railway corresponding week of previous year	125	48 12 0	771 0	82 14 0	1 6 0	132 16 0	...	...	...
Total to corresponding date of previous year	377,063	1,63,428 1 10	19,35,019 10	1,84,510 10 0	20,096 0 5	3,47,036 3 3	60,798	68,302	129,100

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 19th MARCH 1887.			RECEIPTS FOR WEEK ENDING 10th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 12th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 10th MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
240	35,073	145	259	32,559	125	246	15,16,074	126	262 18	17,28,512	140	2,11,836	...

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 3rd March 1888	...	...	9,384
Corresponding week last year	...	...	6,485
Increase	...	...	2,899
Receipts from 1st January to 3rd March 1888	...	...	62,230
From 1st January to 5th March 1887	...	...	53,361
Increase	...	...	8,878
Miles open, week ending 3rd March 1888	...	...	51
Corresponding week last year	...	...	51
Receipts per mile open, week ending 3rd March 1888	...	...	Rs. 124 0 0
Corresponding week last year	...	...	127 2 4
Increase	...	...	56 13 8

DARJEELING, 14th March 1888.

H. BRON, Acting Secretary, D.H.R.



# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, MARCH 28, 1888.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### CONTINGENT EXPENDITURE.

#### FINANCIAL DEPARTMENT—FINANCE.

*Calcutta, the 22nd March 1888.*

#### RESOLUTION.

READ—

Resolution, dated the 20th August 1885.

Circular No. 5, dated the 17th October 1886.

Replies to the Circular.

The Resolution recorded by the Government of Bengal on the 20th August 1885 prescribes the system under which contingent expenditure is at present incurred in Bengal. The expenditure is divided into three classes, viz., *Special*, for which the previous sanction of Government or of some controlling officer is required; *Countersigned*, in which sanction is not required, but the bills have to be countersigned by the controlling officer; and *Contract*, in which a lump sum is placed at the disposal of the disbursing officer, who spends it at his discretion, subject only to the condition that his allotment is not exceeded. By these orders, however, certain items of expenditure, which are not really within the control of the disbursing officer, were included in the *Contract* allotment; and suggestions for an amendment of the system in this and other directions were made in Government Circular No. 5T—F, dated the 17th October 1886.

2. The reports received from the officers consulted show that there is a consensus of opinion in favour of the general proposals contained in the circular. The first object aimed at was the entire removal from the *Contract* system of items which do not depend on the discretion of the controlling officer, and in which, therefore, saving can bring him no credit and

excess should bring him no blame. The second was to enlarge interest and responsibility by allowing the saving of lump grants and the utilization of savings on objects other than contingencies. As regards the first point, it was proposed to follow the Bombay system, and to allow such expenditure to proceed without audit, the order passing the amount being accepted as a voucher by the Accountant-General. This would, however, reduce to only a few items the expenditure classed under "Countersigned Contingencies," and the question was therefore raised whether it would not be expedient to abolish this class altogether. The whole subject was considered at the conference of Commissioners recently held at Calcutta, and it has been decided to abolish this class and to substitute a class to be called *Regular* contingencies, in which the charges as they arise will be incurred by the disbursing officer in accordance with the scales laid down by Government, without sanction of superior authority, and without reference to budget provision. The new class will contain the following items:—

- |   |                              |   |
|---|------------------------------|---|
| 1. Fees to pleaders in criminal cases.                    | 6. Escort charges.           | 14. Municipal rates and taxes.                          |
| 2. Fees to pleaders in civil suits.                       | 7. Remuneration to copyists. | 15. Rewards for the destruction of venomous snakes.     |
| 3. Diet and travelling allowance to witnesses.            | 8. Section-writing.          | 16. Rewards for the destruction of wild animals.        |
| 4. House allowances.                                      | 9. Process-serving charges.  | 17. Compensation for land taken up for public purposes. |
| 5. Charges for remittance of treasure to other districts. | 10. Keep of elephants.       |   |
|   | 11. Diet of insane persons.  |   |
|   | 12. Boarding charges.        |   |
|   | 13. Diet of patients, &c.    |   |

Charges on account of *Regular* Contingencies will be budgeted for in the ordinary manner, and the charges as they arise will be incurred by disbursing officers in accordance with fixed scales without sanction of superior authority and irrespective of budget provision.

3. This enables Government to provide for two classes only of fixed grants for contingencies—(1) *Special*, in which the controlling officer is allowed to sanction up to a certain amount, receiving a contract allowance up to that amount; (2) *Contract*, in which he sanctions all, receiving similarly a lump grant.

The following table shows the items to be placed under each head:—

Special Contingencies.	Contract Contingencies.
1. Purchase of boats.	1. Purchase of tents.
2. Ditto of elephants.	2. Purchase of books and publications.
3. Repairs to steamers and schooners.	3. Petty construction.
4. Cost of supplying provisions.	4. Country stationery.
5. Other items of large amount and unusual character.	5. Remittance of treasure within district.
	6. Hot and cold-weather charges.
	7. Printing at private presses (without grant).
	8. Tour charges.
	9. Treasury charges.
	10. Repairs to tents.
	11. Purchase and repair of furniture.
	12. Purchase of clothing.
	13. Office and ground rent.
	14. Rewards.
	15. Petty repairs.
	16. Law charges.
	17. Postage and telegram charges.
	18. Office expenses.
	19. Miscellaneous.
	20. Process fees advanced.
	21. Repairs of boats.
	22. Country medicines.
	23. Maintenance of strangers and indigent persons.
	24. Burial of paupers.
	25. Support of pilgrims.
	26. Subsistence allowance to vagrants.
	27. Purchase of accoutrements.
	28. Rewards for marksmanship.
	29. Cost of photographs.
	30. Passage and diet money of inmates on release.
	31. Purchase of raw materials for manufactures in lunatic asylums.
	32. Charges for deportation of vagrants.
	33. All other items of expenditure not specially included in <i>Regular</i> or <i>Special</i> Contingencies.

This classification is similar to that proposed in paragraph II of the circular, but a few changes have been made. The headings "Compensation

for land taken up for public purposes," "Municipal rates and taxes," "Rewards for the destruction of venomous snakes," and "Rewards for the destruction of wild animals," are classed under *Regular* Contingencies, as the expenditure on these items cannot be controlled. The headings "Petty construction" and "Purchase of tents" are classed under *Contract* Contingencies, and a new item, "Printing at private presses," has been included in this class. Subject to the sanction of the Government of India, "Section-writing" and "Purchase of books" will be included under *Regular* and *Contract* Contingencies respectively.

4. Under the class of *Special* Contingencies, a lump allotment will be made to each controlling officer to meet all expenditure for which the previous sanction of Government is not required. From this grant Commissioners of Divisions will have power to sanction expenditure up to Rs. 250, the Inspector-General of Police up to Rs. 1,000, and other controlling officers up to Rs. 100. The grants will be calculated on the basis of the expenditure of the past four years. The procedure in respect of *Contract* Contingencies will remain unchanged.

5. Commissioners of Divisions will have the disposal of the whole grants for their divisions on account of *Special* and *Contract* Contingencies, and will allot the grants annually at their discretion. Savings accruing in the grants will be re-granted at the close of the year, and may be spent on contingencies or on temporary establishments without reference to higher authority. This permission to spend savings on temporary establishments is, however, subject to the sanction of the Government of India. Savings may also be spent by Commissioners of Divisions, or under their authority, on grants to local bodies. As soon as possible after the close of each year, the Accountant-General will report to the controlling officers and to Government the savings effected in the grants.

6. The Accountant-General will be asked to issue specific instructions on all questions of detail. The allotment to be made to each officer will be fixed in communication with the Accountant-General, and will be based on the actuals of past years. When fixed, it will remain unaltered for three years, after which it will be subject to revision.

7. The orders contained in this Resolution will have effect from the beginning of the year 1888-89.

ORDER.—Ordered that copies of the Resolution be forwarded to the Board of Revenue, Commissioners of Divisions, District and Sessions Judges, Inspectors-General of Civil Hospitals, Police, and Registration, Sanitary Commissioner, Director of Public Instruction and Accountant-General.

Ordered also that copies of the Resolution be forwarded to all Departments of this Government, except the Public Works Department.

By order of the Lieutenant-Governor of Bengal,

COLMAN MACAULAY,

*Secretary to the Government of Bengal.*

## DISCOVERY OF A PROCESS FOR MANUFACTURING PURE SULPHATE OF QUININE AT MUNGPOO.

### RESOLUTION.

*Dated Calcutta, the 26th March 1888.*

APPREHENSIONS of the extermination, in their native forests, of the Quinine-yielding Cinchona trees having reached an acute stage about thirty years ago, the Government of India decided to take effectual steps to introduce their cultivation into India. The collection of seed and seedlings in the wide tract of difficult country over which the best medicinal sorts are naturally scattered was no easy task. But it was successfully accomplished by Messrs. Markham, Pritchett, Spruce and Cross. Contemporaneously with these efforts on the part of the English Government, the Dutch authorities were at work on behalf of their Malayan Colonies, and by the year 1862 Cinchona cultivation had been successfully initiated in India and Malaya. The localities selected for the experiment of Cinchona growing in India were the Nilgiris and British Sikkim. And the excellence of this selection has been proved by the fact that the original nurseries in both localities have developed into large plantations which still remain in the hands of Government. From these two centres, seed and seedlings have been freely distributed to planters, and large tracts of land, especially in Southern India and Ceylon, have been covered with Cinchona trees by private enterprise.

2. The Cinchona trees thus introduced into India are practically of two sorts: (1) *Quinine* yielders and (2) *Mixed alkaloid* yielders. Of the Quinine yielders there are two kinds, viz., *Yellow* or *Culisaya* (including *Ledgeriana*) and *Crown* or *officinalis*, barks. Of the mixed alkaloid yielders there are also two kinds, viz., *red* or *succirubra*, which has been in cultivation from the beginning, and a kind which has come into prominence during the past few years, and which in Annual Reports has been referred to as *Hybrid* bark. Red bark contains a comparatively small proportion of Quinine with large proportions of Cinchonidine and Cinchonine. It had been chiefly used by druggists in the preparation of decoctions and tinctures, and had not been used by Quinine makers as a source of Quinine. This red-bark tree was, however, the kind which in the early days of the cultivation it was found most easy to propagate; and in all plantations, both public and private, it greatly preponderated over the other sorts.

3. The cultivation of Cinchona trees having been pushed beyond the region of experiment, the next problem that presented itself was the utilization of their bark. For the private grower, the most lucrative course up to the present time has been to sell the crude bark in London. The object of Government was not, however, to secure a financial success, but to provide the people of the country, at the lowest possible rate, with an efficient remedy for the most prevalent of all the diseases of the country. The first step for Government to take was therefore to discover whether it was really a fact that Quinine is the only alkaloid worth extracting separately from Cinchona bark, and whether Cinchonidine and Cinchonine might not each be an efficient febrifuge. It was true that Quinine alone had got into use as a febrifuge, and that it alone of the Cinchona alkaloids had found a place in the British Pharmacopœia. On the other hand, tinctures, decoctions and various pharmaceutical preparations of red bark, into the constitution of which all three alkaloids must undoubtedly enter, had for many years borne the reputation of excellent remedies for fever. The presumption therefore appeared to be that the position claimed for Quinine as the only real febrifuge yielded by Cinchona bark would prove, on careful examination, to be untenable; and that the other two alkaloids would also be found

to have value as febrifuges. For the purpose of investigating this point, Commissions of medical officers of all three Presidencies were formed during the years 1866 to 1868. These Commissions were furnished with supplies of the three alkaloids, pure and unmixed, and after very extensive trials, their unanimous verdict was that Cinchonidine and Cinchonine are both excellent febrifuges, the former not much less efficient than Quinine itself.

4. Having thus established the value of Cinchonidine and Cinchonine, the next point to be settled was how best to utilize the large stocks of these alkaloids contained in the bark of the trees growing in the Government plantations. To do this, Messrs. Broughton and Wood, two professional chemists, were engaged in England and were located as Government Quinologists on the Nilgiri and Sikkim plantations respectively. Mr. Broughton (the Nilgiri Quinologist), as the result of his labours, invented a preparation of red bark which he called *Amorphous Quinite*, and which contained all the alkaloids of red bark in the form of a non-crystalline powder. Of this *Amorphous Quinine* no large amount was ever manufactured; and its preparation ceased when Mr. Broughton resigned the service of Government. Mr. Wood, who did not arrive at the Sikkim plantation until 1873, concluded, after much observation and experiment, that the best way of utilizing the red bark was to make from it the preparation now so well known as *Cinchona Febrifuge*. This, like Mr. Broughton's, is in the form of a powder, and contains the three chief alkaloids of red bark mixed in the proportions in which they naturally occur in the bark. *Cinchona Febrifuge* was then a perfectly new product, unknown to Pharmacy, and it was not clear how it might be accepted by the medical profession.

Mr. Wood therefore adopted for its manufacture on a small tentative scale a simple and inexpensive acid and alkali process, requiring only the rudest apparatus. He intended, should the product be favourably accepted by the medical profession, to replace this simple process by one more efficient, but more complicated, and involving the extensive use of spirit. During the first year of its manufacture (1874-75), only 48 pounds of this new drug were issued. At first, and chiefly owing to a misapprehension as to the proper dose in which it should be given, some prejudice existed against this drug. In 1875-76, however, 1,940 pounds of it were consumed, and its consumption so materially increased during succeeding years that, up to the present date, no less than 87,704 pounds have been issued from the factory. A preparation similar to, and avowedly an imitation of, *Cinchona Febrifuge* is now made and sold in London under the name of *Quinetum*, but until *Cinchona Febrifuge* had first been manufactured in India, no similar preparation existed. It is therefore a remedy for which the world at large is indebted to India. *Cinchona Febrifuge* has been used in India as a substitute for Quinine. It has been so used by Government in its own medical institutions, and it has been freely offered to the Indian public. Its sale has, however, been restricted to the limits of India. From the beginning, and until now, its price has uniformly been sixteen rupees eight annas per pound, and in this respect it has presented a contrast to Quinine, the price of which has fluctuated considerably, rising at one time as high as 16s. 6d. per ounce. According, however, to statistics prepared by an English pharmacologist, the average price of Quinine in London from 1875 to 1887 (the period during which *Cinchona Febrifuge* has been in use) has been 8s. 4½d. per ounce. The sterling value (calculated at this average rate) of 87,704 pounds of quinine would be £587,616, while this quantity of febrifuge has actually been delivered to the Indian consumer for the sum of Rs. 14,17,116. The actual saving to India has therefore been very great, and the capital account of the plantations (about eleven lakhs of rupees) has been covered several times.

5. The preponderance of red-bark trees in the Sikkim plantation, while he was attached to it, naturally induced Mr. Wood to give his attention first to the utilization of their bark. But he by no means neglected the Quinine barks. Of these barks only one,—*Calisaya* and its variety *Ledgeriana*,—really thrives in Sikkim, the Crown bark, or *Cinchona officinalis*, tree having proved a



comparative failure. Mr. Wood made many experiments in the manufacture of pure Sulphate of Quinine; but, up to the time of his retirement, for private reasons, from the service of Government in 1879, he had not succeeded in discovering an efficient process. Mr. Wood was of opinion that good Quinine barks could be grown in Sikkim, and that it might be possible to extract the Quinine from them on the plantation. Dr. King, the Superintendent of the Plantation, was very strongly of this opinion, and in 1875 he recommended that all further planting of red-bark trees should cease. This recommendation was not acted upon for some time. Full effect has, however, been given to it of recent years, and *succirubra* has been supplanted by *Culisaya* to the extent of about a million trees. The retirement of Mr. Wood did not put an end to the experiments on the manufacture of Quinine. Mr. Gammie, the Resident Manager, took the matter up with energy, and, encouraged and assisted by Dr. King, he carried on a long series of experiments on an acid and alkali process of manufacture by which he succeeded in producing excellent Quinine. He never, however, succeeded in recovering much more than half of the amount contained in the bark upon which he operated. The acid and alkali process had therefore to be abandoned as wasteful and inefficient. A process depending on the maceration of the bark in spirit was next tried; but, after much experiment, it was in turn abandoned. During a visit which he paid to Holland in 1884, Dr. King acquired some hints as to a process of extraction by means of oil. And now, benefiting by the advice of some chemical friends, Mr. Gammie has been able to perfect this process, with the result that the whole of the Quinine in yellow bark can be extracted in a form undistinguishable, either chemically or physically, from the best brands of European manufacture. This can be done so cheaply that, as long as the supply of bark is kept up, Quinine need never cost Government much above twenty-five rupees per pound. It is true that, at the present moment, Quinine is obtainable in the open market at rates not very different from this; but that is due to entirely exceptional causes. For some time back the Ceylon planters have been up-rooting their Cinchona trees, both to save them from disease, and to make way for tea planting which appears now to be becoming the principal industry of that Colony; and Cinchona bark has actually been sold in London below the cost of its production in Ceylon. Indeed, so far has the fall in price gone, that South American bark has been practically driven out of the market. This is a state of matters which cannot continue very long, and which is not likely to recur. In the ordinary course, therefore, Quinine might be expected soon to rise to what may be considered its normal price. The object of making public the process now discovered is to check this rise in the price of a drug of such general utility.

6. The cordial thanks of Government are due to Dr. King and his coadjutors—and especially to Mr. Gammie—for the patience, energy and resource displayed by them in their long search for the best method of utilizing these valuable medicinal barks. The Government has no desire to make a profit by the discovery, and the details are now produced in order that private growers of Cinchona may be enabled to take full advantage of the process, and that a permanent reduction in the price of Quinine may ensue.

By order of the Lieutenant-Governor of Bengal,

COLMAN MACAULAY,

Secretary to the Government of Bengal.

*Method of extraction of the alkaloids from Cinchona Bark by cold oil as used at the Government Cinchona Factory in Sikkim.*

In order that the oil may speedily and effectually act on the Cinchona bark, the latter is reduced to a very fine powder by means of Carter's Disintegrator; and the powder of a uniform fineness, it is passed through a scalper, which is a machine commonly used for sifting flour. The scalper is in the form of a box enclosing a sloping, six-sided, revolving

chamber, covered with silk of 120 threads to the lineal inch. It is driven at the speed of about thirty revolutions to the minute. Any particles of the powder which may be too coarse to pass through the silk meshes drop out at the lower end of the revolving chamber and are again passed through the Disintegrator.

2. \* A hundred parts of the finely-powdered bark are then set aside to be mixed with 8 parts of commercial caustic soda, 500 parts of water, and 800 parts of mixture composed of one part of fusel oil to four parts kerosine oil. If the caustic soda be of inferior quality, a little slaked lime (about 5 parts) may be used in addition to the eight parts of caustic soda; or caustic soda may be altogether omitted, and 15 parts of slaked lime may be used instead of it. The caustic soda is dissolved in the water and mixed with the bark. Then the oil is added, and the whole is kept thoroughly intermixed in an agitating vessel. Should lime be used, it is mixed in fine powder with the dry bark before adding the water and oil.

3. The agitating vessels in use at Mungpoo are barrels with winged stirrers revolving in them vertically, and with taps on the sides for drawing off the fluids. The first stirring is carried on for four hours, and then the whole is allowed to rest quietly in order that the oil may separate out to the top of the watery fluid. When the oil, which has now taken up the greater part of the alkaloids, has cleared out, it is drawn off by a tap placed just above the junction of the two fluids. The oil is then transferred to another agitator, and is there thoroughly intermixed with acidulated water for five or ten minutes, the mixture being again allowed to rest for the separation of the oil. It will now be found (if sufficient acid has been used and the stirring has been thorough) that the alkaloids have been removed from the oil to the acidulated liquor. The oil is again transferred to the bark mixture, and is kept intermixed with it for two or three hours; the oil is again drawn off in the same way, washed as before in the same acidulated liquor; and this process is repeated a third or a fourth time or until it is found, by testing a small quantity of the oil, that the bark has been thoroughly exhausted of its alkaloids. Each stirring subsequent to the second, need not be continued for more than an hour. The quantity of acid required to take up the alkaloids from the oil will entirely depend on the quality of the bark operated on. If the bark contains 4 per cent. of alkaloids, about 2 lbs. of either sulphuric or muriatic acid mixed in twenty gallons of water should be sufficient, and so on in proportion.

4. The after-treatment of the acidulated water containing the alkaloids depends on the product desired, and on the kind of acid that has been used. Should sulphate of quinine be desired and sulphuric acid have been used, the liquor is filtered (if necessary), heated and made neutral by adding a very weak solution of either caustic soda or liquor ammonia. It is then allowed to cool, and as it cools the crystals form out. These crystals are afterwards separated from the mother liquor by draining through a cloth filter. After they have been thus obtained, the crystals are dried. They are next dissolved in about fifty times their weight of boiling water. The resulting liquor is filtered hot through a little animal charcoal. On cooling after filtration the crystals again form out, and they are separated as before from the mother liquor by filtration through a cloth. The crystalline mass obtained by filtration is then placed in small lumps on sheets of white blotting paper stretched on slabs of plaster of Paris. By this means they are practically dried. They are afterwards thoroughly dried by being laid on blotting paper in a room heated to about 10 degrees above the temperature of the open air.

5. If Cinchona febrifuge is wanted, the alkaloids are exhausted from the oil by muriatic acid, the solution being neutralized and filtered in the same way. On an excess of caustic soda solution being added, the alkaloids are precipitated. After standing some hours the whole bulk of liquor and precipitate is passed through cloth filters; and when the alkaline liquor has drained off, the precipitate is washed with a little plain water, dried, and powdered. The powder is Cinchona Febrifuge ready for use.

The 24th March 1888.

J. A. GAMMIE.

## CUSTOM HOUSE REGULATIONS.

## FINANCIAL DEPARTMENT—CUSTOMS.

*Calcutta, the 27th March 1888.*

## RESOLUTION.

SOME correspondence has lately passed between Government and the Chamber of Commerce regarding the existing Custom House Regulations. The points which, in the opinion of the Committee of the Chamber require attention, are—

- (1) The number of holidays.
- (2) The charges for overtime working.
- (3) The system of passes and the general routine of Custom House business.

The first two points are within the competence of the Local Government to determine. The third, however, can only be usefully discussed in connection with proposals for the amendment of the Imperial Act for the Regulation of Sea Customs (Act VIII of 1878). Before deciding whether any representation should be made to the Government of India on this subject, the Lieutenant-Governor considers it desirable that the question should be thoroughly investigated and reported upon by a Committee. The following Committee is accordingly appointed for this purpose :—

## PRESIDENT :

1. Hon'ble Colman Macaulay, C.I.E., Secretary to the Government of Bengal.

## MEMBERS :

2. Hon'ble Robert Steel.
3. E. D. Wylie, Esq.
4. J. Scobell Armstrong, Esq., Collector of Customs.

The Committee will be requested to consider the first and second points mentioned above as well as the third. They will also be invited to favour Government with their opinion on certain memorials which have been submitted by members of the Preventive Service.

By order of the Lieutenant-Governor of Bengal,

L. P. SHIRRES,

*Under-Secy. to the Govt. of Bengal.*

## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 24th March 1888.

No.	District and date of return	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
<i>Western Districts.</i>			
<b>BURDWAN DIV.</b>	1 Burdwan Mar. 24, '88	Nil	Weather—seasonable. State and prospects of crops good. Sugarcane outturn excellent. Common rice is now selling at 22 seers per rupee. There is severe cholera at Raneejunge affecting cooly emigrants. There have been over 150 fatal cases.
	2 Bankura „ 24, '88	Nil	Weather—hot and dry. Pressing of sugarcane nearly finished; yield will be 14 annas in the Sudder sub-division. Wheat, barley and mustard are being reaped. Prices continue unaltered.
	3 Beerbhoom „ 24, '88	Nil	Weather—warm; west winds. Wheat is being harvested.
	4 Midnapur „ 24, '88	Nil	Weather—hot; west wind. Boro crop doing well.
	5 Hooghly „ 24, '88	Nil	Weather—normal. Prospects of crops continue good.
<b>PRESIDENCY DIV.</b>	6 Serampur „ 26, '88	0.03	
	7 Howrah „ 26, '88	Nil	Weather—seasonable. Boro crop promising.
	<i>Central Districts.</i>		
	8 24 Pergah Mar. 27, '88	Nil	Weather—very hot and bright. Morning fogs for part of the week. All standing crops flourish. Ploughing continues.
	9 Naddea „ 24, '88	Nil	Weather—seasonable; temperature rising. Wind westerly. Great activity in indigo sowing. Tillage for early rice in progress. Gram, wheat and barley good. Outturn of winter crops good.
<b>RAJSHAHY DIV.</b>	10 Khoolna „ 24, '88	Nil	Weather—considerably warmer. Boro rice promises well.
	11 Jessore „ 21, '88	Nil	Hot weather has set in, and the heat is rather severe. The rainfall of the last week has facilitated the sowing of paddy and indigo. Prospects of boro good.
	12 Moorshehabad „ 24, '88	Nil	Weather—getting warmer. Rubbi crops are still being harvested.
	13 Dinagepur Mar. 24, '88	Nil	Weather—rather hot. Sugarcane is being planted and jute sown. Prospects of rubbi good. Price of rice stationary.
	14 Rajshahye „ 24, '88	Nil	Weather—getting hot. Spring crops are being reaped. Lands are being prepared for early sowings.
<b>RAJSHAHY DIV.</b>	15 Rangpur „ 24, '88	Nil	Weather—clear and warm. Sowing of aus and jute commenced. Tobacco is being cut. Prospects of wheat and tobacco good.
	16 Bogra „ 24, '88	Nil	Weather—seasonable. Rain would be useful for early sowings. Prospects continue good.
	17 Pabna „ 24, '88	Nil	Weather—hot with strong wind. Prospects of crops good.
	18 Darjeeling „ 24, '88	Nil	Weather—still unsettled; only slight rain here and there. Ploughing continues in the Terai. Prospects of crops favourable.
	19 Julpigore „ 24, '88	Nil	Weather—seasonable; at times cloudy. Standing crops doing well. Ploughing for aus and jute continues. Prices stationary.
<i>Eastern Districts.</i>			
<b>BAHAR DIV.</b>	20 Dacca Mar. 24, '88	Nil	Weather—hot and stormy. Pulses are being gathered; outturn good. Ploughing for rice and jute going on. Early rice plants doing well.
	21 Narasingganj „ 24, '88	3.39	No rain during the week. Weather dry and hot. Harvesting of cold-weather crops continues.
	22 Farroadpur „ 24, '88	Nil	Weather—seasonable. Prospect of crops good.
	23 Backergunge „ 24, '88	0.20	Weather—hot. Prospects of crops good.
	24 Mymensingh „ 23, '88	Nil	
<b>BAHAR DIV.</b>	25 Jamalpur „ 23, '88	0.19	
	26 Kishoreganj „ 23, '88	0.88	
	27 Attia „ 23, '88	0.76	
	28 Netrokona „ 23, '88	Nil	
<b>CHITTAGONG DIV.</b>	29 Chittagong Mar. 27, '88	Nil	Weather—seasonable. Outturn of winter crops fair. Prices steady.
	30 Cox's Bazar „ 23, '88	0.29	Weather—seasonable. Some of the pulses are being harvested. Cultivation of aus progressing.
	31 Fenny „ 23, '88	0.91	Weather—more moist than is usually experienced at the time of the year. Good crops are being harvested where they have arrived at maturity. Those that are not ripe yet are coming on very nicely. The lands are being prepared for fresh cultivation. Both state and prospects are excellent.
	32 Tipperah „ 23, '88	0.90	Weather—rainy and stormy during the first four days of the week; hot and sultry since. Jam cutting has re-commenced after the rain. Tobacco and other crops doing well.
	33 Brahmanbariah „ 23, '88	5.09	
<b>CHITTAGONG DIV.</b>	34 Chaudpur „ 23, '88	1.06	
	35 Chittagong Hill Tract „ 20, '88	0.81	Weather—warm. Boro paddy and chillies doing well.
<b>CHITTAGONG DIV.</b>	36 Hill Tipperah „ 23, '88	2.22	

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BEHAR.</b>			
PATNA DIV.	26 Patna Mar. 24, '88	Nil	Weather—sultry with high west wind. <i>Rabbi</i> crops are still being harvested; fair outturn expected. <i>Masoor</i> and peas extensively damaged by insects in the Barh sub-division. Sugarcane pressing and opium collection almost completed.
	27 Gya „ 24, '88	Nil	Weather—seasonable. Harvesting of <i>rabi</i> and extraction of opium nearly finished. Sugarcane being irrigated.
	28 Shahabad „ 24, '88	Nil	Weather—hot with strong west wind. Harvesting of <i>rabi</i> nearly over; threshing has commenced. Collection of opium almost completed; prospects very good, better than for many years past both as to quantity and quality.
	29 Darbhanga „ 24, '88	Nil	Weather—getting warm. <i>Rabbi</i> harvest in progress. <i>Moong</i> and early rice are being sown. Collection of opium still going on. Indigo has germinated in places. Price of common rice averages 21 seers per rupee.
	30 Mozufferpur „ 24, '88	Nil	Weather—warm; west wind. <i>Rabbi</i> harvest progressing; threshing commenced. Paddy, <i>moong</i> and <i>chiza</i> are being sown; earlier sowings have already germinated.
	31 Saran „ 24, '88	Nil	Weather—getting hot gradually. Harvesting of <i>rabi</i> crops progressing. Gathering of opium almost over in many places. Indigo sowings going on. Prospects of all standing crops good.
	32 Champaran „ 24, '88	Nil	Weather—dry with high west wind. <i>Rabbi</i> crops are being reaped. Extraction of opium in full swing and approaching completion; produce good. Indigo sowings progressing.
BHAGALPORE DIV.	33 Monghyr Mar. 24, '88	Nil	Weather—seasonable; strong north-westerly wind blowing at the time of report. <i>Rabbi</i> harvest in progress; outturn fair. Opium collection finished with good outturn.
	34 Bhagulpur „ 24, '88	Nil	Weather—seasonable. <i>Rabbi</i> harvest in progress. Rice and <i>moong</i> being sown in low lands in the north.
	35 Purneah „ 24, '88	Nil	Temperature rising; west wind prevails. In the Sudder sub-division wheat and oats are light crops, but in other sub-divisions they are good. Other cold-weather crops fair. Land is being prepared for <i>bhadai</i> and jute.
	36 Mahlah Chanchal „ 24, '88	0.05	Weather—days warm, mornings and evenings cool. Harvesting of <i>rabi</i> crops continues. <i>Boro</i> paddy is being transplanted. Common rice is selling at 22 seers per rupee at English Bazar.
	37 Southul Pergah. Dighur „ 24, '88	0.05	Weather—hot with strong west wind. Harvesting of wheat, barley, and linseed still going on; outturn below the average. Prospects of <i>mohua</i> crop good. Prices stationary.
<b>ORISSA.</b>			
ORISSA DIV.	38 Cuttack Mar. 23, '88	2.13	Weather—fair. Threshing of <i>sarad</i> going on in some places and completed in others. <i>Dalua</i> is flowering and partly ripening. Price of rice stationary.
	39 Pooree Khorda „ 22, '88	Nil	Weather—seasonable. Land is being ploughed for the ensuing <i>sarad</i> crop. <i>Rabbi</i> crop is being gathered. <i>Dalua</i> crop is being harvested. Mango suffers for want of rain. Common rice 24 seers 4 chittacks per rupee in the Sudder sub-division and 23 seers 8 chittacks in the Khorda sub-division.
	40 Balasore „ 23, '88	0.50	Weather—days hot, but nights still cool. Rainfall beneficial to cultivation, but some damage to fruit and vegetables by hail in the Bhadruck sub-division.
<b>CHOTA NAGPORE.</b>			
South-West Frontier Agency.			
CHOTA NAGPORE DIV.	41 Hazaribagh Mar. 23, '88	Nil	Weather—seasonable; very warm. Stormy winds. Prospects of mango and <i>mohua</i> continue good. Gathering of opium almost completed. Condition of agricultural stock fair.
	42 Lohardugga „ 24, '88	Nil	Weather—getting warmer. Harvesting of <i>rabi</i> crops continues. Prospect of <i>mohua</i> good.
	43 Singhbhum „ 23, '88	Nil	Weather—clear and getting very warm. <i>Rabbi</i> being harvested. Cotton coming into blossom. Sugarcane being planted. Mango and <i>mohua</i> promising.
	44 Munbhum „ 24, '88	Nil	Weather—hot with strong west wind. Wheat, barley and oats are being harvested; outturn varies from 6 to 12 annas. <i>Mohua</i> is mostly doing well.

Published for general information.

CALCUTTA, REVENUE DEPT.;  
The 27th March 1888.P. NOLAN.  
Secy. to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from  
18th to 24th March 1888.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
Mar.	18th	148.0	10.0	29.904	82.3	91.6	18.7	73.5	75.2	0.782	71.8	73	SW by S and variable	100	Nil	Chiefly clear, o
"	19th	148.5	10.1	29.899	82.3	91.8	18.5	73.3	76.2	0.817	73.1	76	SW by S and SSW	89	"	Chiefly clear, o
"	20th	148.7	9.5	29.908	82.3	93.0	18.0	75.0	72.7	0.880	67.7	65	WSW, WNW and NE by N.	50	"	Chiefly clear, o
"	21st	148.4	10.2	29.829	82.3	95.0	23.8	71.2	73.7	0.718	69.3	69	SW and SSW	123	"	Clear, o, p.
"	22nd	151.5	9.8	29.773	84.1	96.5	22.3	74.2	74.1	0.726	69.6	67	SW and WNW	104	"	Chiefly clear, o
"	23rd	151.9	9.6	29.743	84.3	97.5	21.2	73.3	72.6	0.617	66.3	61	SW and WNW	121	"	Clear, o, p.
"	24th	150.5	9.0	29.712	84.3	98.9	20.1	72.8	71.5	0.721	69.4	61	SW and SSW	150	"	Chiefly clear, o

The mean pressure of the seven days	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, S. G.'s Office	...	...	...	29.824
The total number of hours of bright sunshine	...	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	...	84.6
The mean temperature of the seven days	...	...	...	°
The average temperature of the corresponding period for 24 years, S. G.'s Office	...	...	...	83.1
The extreme variation of temperature	...	...	...	27.7
The maximum temperature	...	...	...	95.9
The highest velocity of the wind in one hour	...	...	...	Miles.
The highest pressure of wind on one square foot	...	...	...	lbs.
The mean relative humidity	...	...	...	%
The average relative humidity of the corresponding period for 24 years, S. G.'s Office	...	...	...	67
The total fall of rain from 18th to 24th March 1888	...	...	...	Inches.
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	Nil
The total fall from 1st January to 24th March 1888	...	...	...	0.29
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	4.89
	...	...	...	2.68

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly in the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o. = overcast. d. = dew. = fog.

JOHN ELLIOT,

Offg. Meteorological Reporter to the Govt. of India.

Meteorological Office, GOVT. OF INDIA;

Calcutta, 26th March 1888.



## Meteorological Report of the Province of Beng

METEOROLOGICAL DIVISION.	DISTRICT.	Representative station.	STATION OBSERVATIONS.												
			AIR PRESSURE.			WIND.			TEMPERATURE.						
			Mean barometric height, 10 A.M.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature.	Mean from normal mean of week.
ORISSA.	Pooree	Pooree	29.935	29.957	—	—	—	88.8	23rd Mar.	76.1	22nd Mar.	87.3	77.7	82.5	—
	Gopalpore	Gopalpore	29.904	29.934	—0.02	SSW	302.0	17.7	23rd	17.3	22nd	85.8	78.2	82.0	+2.4
	False Point	False Point	29.904	29.904	+0.00	SSW	261.0	47.4	23rd	74.0	19, 20, 21, Mar.	80.3	75.3	80.8	+0.1
	Cuttack	Cuttack	29.974	29.986	+0.012	Calm	48.0	148.0	23rd	70.3	21st	97.3	78.0	86.7	+1.3
NORTH-WEST BENGAL.	Baharee	Baharee	29.810	29.853	+0.043	S	72.3	28.9	23rd	67.3	17th	98.4	71.7	82.7	+1.3
	South-West Midnapore	Saugor Island	29.899	29.903	+0.004	SSW	377.0	90.2	23rd	72.0	17th	87.0	77.3	82.4	+0.6
	South 24-Pargannas	Midnapore	29.896	29.906	+0.010	Variable	84.0	103.4	23rd	68.2	17th	90.0	70.0	84.8	+2.7
	Midnapore	Midnapore	29.896	29.906	+0.010	Variable	84.0	103.4	23rd	68.2	17th	90.0	70.0	84.8	+2.7
NORTH-WEST BENGAL.	Howrah	Calcutta	29.910	29.940	—0.04	SW	80.0	10.3	23rd	68.8	17th	82.7	73.7	82.7	+2.0
	Hooghly	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Burdwan	Burdwan	29.833	29.833	+0.002	SW	64.8	191.7	23rd	64.3	20th, 21st Mar.	85.0	63.8	83.0	+8.1
	Bankura	Bankura	29.820	—	—	NW	63.0	142.1	23rd	67.5	20th	98.7	69.3	84.0	—
NORTH-WEST BENGAL.	Beerbhoom	Beerbhoom	29.801	29.810	+0.013	WSW	67.5	102.1	23rd	67.3	18th	80.6	69.3	84.2	+2.2
	West Burdwan	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Mooredahad	Berhampore	29.851	29.921	—0.008	SW	81.9	10.7	23rd	63.3	20th & 21st Mar.	85.7	66.0	81.3	+1.0
	Nadua	Krishnaghat	29.845	29.911	—	WSW	94.3	60.8	23rd	63.3	21st	100.2	69.0	81.0	—
NORTH-WEST BENGAL.	Jessore	Jessore	29.808	29.940	+0.001	WSW	65.1	90.3	23rd	67.6	21st	100.0	72.6	84.3	+2.8
	Khokha	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Chittagong	Chittagong	29.896	29.967	+0.075	SE	90.0	86.6	21st	67.1	21st	80.1	60.7	77.4	—0.4
	Chittagong Hill Tracts	Domagiri	—	—	—	—	—	—	—	—	—	—	—	—	—
EAST BENGAL.	Backergunge	Batticala	29.934	29.950	+0.016	—	120.0	63.8	23rd	70.4	21st	10.8	72.8	81.8	+3.1
	Noakhally	Noakhally	29.920	29.967	+0.047	SSW	163.6	80.7	21st, 22nd Mar.	63.3	17th	86.8	72.0	79.2	+1.7
	Furteedpore	Furteedpore	29.901	29.943	0	NW	94.0	61.0	10th, 20th Mar.	67.9	17th	87.9	70.8	87.4	+0.5
	Dacca	Dacca	29.915	29.942	+0.027	SSW	114.0	64.1	23rd	70.0	21st	100.0	72.1	81.9	+1.7
EAST BENGAL.	Comilla	Comilla	29.920	29.950	+0.030	S	123.2	61.2	23rd	66.4	17th	86.8	71.4	80.1	+0.7
	Mymensingh	Mymensingh	29.906	29.944	+0.038	ESE	126.8	83.3	22nd, 23rd Mar.	66.5	17th	87.8	69.9	78.9	+4.0
	Bogra	Bogra	29.934	29.968	+0.034	Easterly	95.4	60.8	23rd	64.4	17th	84.3	60.2	80.3	—
	Patna	Serajunge	29.878	29.920	+0.042	S	72.6	61.4	23rd	63.8	17th	81.0	67.0	76.0	+1.0
NORTH BENGAL.	Rajshahi	Rajshahi	29.843	29.919	+0.076	SW	60.3	66.4	23rd	58.7	21st	83.6	62.3	77.8	+1.4
	Maldah	Maldah	29.848	—	—	NW	73.7	60.1	23rd	67.3	10th	94.8	62.1	77.4	—
	Dinapore	Dinapore	29.850	29.921	—0.04	ESE	101.0	64.0	23rd	61.0	17th	86.8	63.2	78.0	+1.3
	Rangpore	Rangpore	29.801	29.927	—0.009	S	70.0	62.0	23rd	62.5	19th	83.8	60.4	77.8	+2.4
NORTH BENGAL.	Jalpaiguri	Jalpaiguri	29.840	29.932	—0.027	ESE	75.1	60.0	22nd	60.4	18th	84.0	64.9	74.5	+0.2
	Cooch Behar	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Darjeeling Hill Tracts	Darjeeling	29.896	—	+0.012	Calm	93.0	67.3	23rd	41.0	10th	54.3	43.3	49.8	—1.3
	Purneah	Purneah	29.801	29.930	+0.008	Calm	31.0	59.1	23rd	60.7	17th, 18th Mar.	90.7	63.0	77.1	+0.6
NORTH BENGAL.	North Bhagulpore	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Monroepore	Monroepore	—	—	—	—	—	—	—	—	—	—	—	—	—
	Durkhanga	Durkhanga	29.744	29.915	—0.04	ESE	111.0	68.3	23rd	63.0	20th	87.8	66.0	76.9	+0.8
	Chumpana	Notihari	29.652	29.881	—0.13	SE	173.1	63.9	22nd	53.6	18th	91.2	56.0	74.1	—1.3
NORTH BENGAL.	Asan	Chupra	29.700	29.901	—0.03	W.W.NW	102.0	63.6	10th	63.4	10th	81.0	64.3	77.6	—1.0
	—	Behres	29.603	29.917	+0.055	W	308.8	69.4	23rd	64.0	17th	90.8	71.0	83.3	+0.3
	Shahabad	Buzar	29.680	29.923	—0.001	W.NW	186.0	67.4	23rd	61.4	17th	86.8	64.8	78.3	+0.4
	—	Arrah	29.663	29.901	—0.00	W	125.3	60.9	22nd, 23rd Mar.	61.2	10th	95.0	64.3	80.1	+0.2
NORTH BENGAL.	Gya	Gya	29.627	29.903	—0.018	W.NW	138.2	100.1	23rd	63.3	20th	90.2	62.6	81.3	+0.1
	Patna	Bankipore	29.720	29.914	—0.010	W.NW	100.1	68.0	23rd	61.3	19th	94.3	65.3	80.1	+0.4
	South Bhagulpore	Bhagulpore	29.750	29.922	+0.044	NW	80.0	67.3	23rd	60.0	20th	94.3	64.0	79.2	+1.0
	South 24-Pargannas	Dooinka	29.412	—	—0.00	W.NW	95.1	60.7	23rd	60.8	20th	90.4	62.6	81.0	+0.2
NORTH BENGAL.	Hazratibagh	Hazratibagh	27.943	29.904	+0.000	NW	236.4	64.0	22nd, 23rd Mar.	58.3	17th	91.3	64.3	79.1	+0.2
	Lohardogga	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Manbhoom	Manbhoom	27.767	29.886	—0.008	NW	100.0	68.3	23rd	61.0	17th	81.1	60.7	77.0	—0.3
	Singhbhoom	Chyebham	29.173	—	+0.034	SSW	30.6	101.9	23rd	60.8	17th	80.2	60.7	75.0	—0.3

Explanation. — Summary. — The normal means of air pressure and temperature are the arithmetic averages of the means of the observations for the year 1871-80. The humidity of the atmosphere is expressed as percentage, saturated air being represented by 100. A heavy dew is denoted by 100. The numerical means or averages of the rainfall in the district determined from the observations in the district during the year 1871-80, divided by the number of stations. A heavy dew is denoted by 100.

for the week ending Friday, the 23rd of March 1888.

DISTRICT OBSERVATIONS.															Representative station.	DISTRICT.	METEOROLOGICAL DIVISION.
No.	Average humidity at 10 A.M.	Average cloud amount at 10 A.M. for week.	Rainfall of week at observing station.	OF WEEK.		RAINFALL.						Average number of rainy days.	Normal number of rainy days.				
						Since 1st of month.			Since 15th May 1887.								
				Mean for district.	Normal mean.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.						
10	1.0	NH	0.08	0.18	0.03	0.00	0.00	-0.07	46.50	57.94	-11.44	0.5	0.5	Pooree	Pooree	ORISSA.	
26	0	NH	-	-	-	-	-	-	-	-	-	-	-	Gopinipore	Pooree		
27	1.4	0.08	-	-	-	-	-	-	-	-	-	-	-	Pake Point	Pake Point		
28	0.3	1.66	0.20	0.24	0.03	0.02	-0.20	-0.20	48.20	51.00	-0.10	0.8	0.5	Cuttack	Cuttack		
29	0.1	0.58	0.30	0.31	0.02	0.07	-0.20	-0.20	40.20	50.00	-0.07	0.7	0.5	Baharsore	Baharsore	SOUTH-WEST BENGAL.	
30	2.0	0.14	0.10	0.17	0.02	0.03	-0.41	-0.41	62.02	64.92	-1.00	0.7	0.4	Sankar Island	South-West Midnapore		
42	0.1	NH	NH	0.37	0.70	1.03	-0.00	-0.00	20.00	23.93	-0.15	0.0	0.5	Midnapore	Midnapore		
62	0	NH	0.04	0.27	1.07	1.03	+0.00	+0.00	44.28	51.00	-10.28	0.1	0.0	Calcutta	Calcutta		
84	0	NH	NH	0.17	0.73	0.66	-0.13	-0.13	47.08	48.61	-0.03	0.0	0.5	Burdwan	Burdwan	SOUTH-WEST BENGAL.	
84	0	NH	NH	0.26	0.12	0.22	-0.70	-0.70	51.57	53.83	-2.26	0.0	0.7	Bankura	Bankura		
18	0	NH	NH	0.04	0.35	0.41	-0.06	-0.06	49.00	50.86	-1.77	0.0	0.3	Ranagunga	West Burdwan		
63	0	NH	NH	0.10	0.41	0.60	-0.00	-0.00	60.53	51.11	+9.42	0.0	0.4	Bochampur	Bochampur		
40	0.1	NH	NH	0.26	2.11	0.94	+1.17	+1.17	40.56	51.46	-4.90	0.0	0.5	Krishnagar	Nuddea	EAST BENGAL.	
67	0.4	NH	NH	0.43	1.81	1.33	+0.40	+0.40	45.26	50.37	-11.11	0.0	0.8	Jessore	Jessore		
70	5.4	0.00	0.07	0.46	1.37	1.54	+0.08	+0.08	102.44	110.72	-18.28	1.0	0.0	Chittagong	Chittagong		
73	2.3	NH	0.11	0.30	1.62	1.30	+0.23	+0.23	64.02	59.73	-10.71	0.8	0.8	Dumturi	Chittagong Hill Tracts		
75	3.9	0.20	0.23	0.68	3.71	2.35	+1.36	+1.36	78.53	113.18	-31.65	1.0	1.0	Nankhilly	Nankhilly	EAST BENGAL.	
76	0.3	NH	NH	0.61	3.81	1.73	+2.08	+2.08	41.51	50.33	-17.81	0.0	1.2	Farrukpore	Farrukpore		
78	2.1	NH	NH	0.20	4.56	1.45	+3.11	+3.11	47.15	63.73	-16.58	0.0	0.9	Dacca	Dacca		
74	2.3	0.16	1.22	1.27	0.70	0.05	+0.08	+0.08	50.18	75.13	-24.95	0.8	1.4	Comilla	Comilla		
79	3.9	NH	0.12	0.52	2.09	1.17	+0.92	+0.92	65.57	69.62	-4.05	0.2	0.8	Mymensingh	Mymensingh	SOUTH BENGAL.	
85	0	NH	NH	0.25	0.43	0.05	+0.22	+0.22	61.58	58.60	+2.98	0.0	0.5	Bogra	Bogra		
86	0.0	NH	NH	0.20	1.76	0.90	+0.86	+0.86	47.08	55.01	-8.13	0.0	0.5	Sonmug	Pabna		
49	0	NH	NH	0.10	1.20	0.45	+0.75	+0.75	51.05	55.46	-4.41	0.0	0.1	Rangpur	Rangpur		
53	0	NH	NH	0.14	0.17	0.33	-0.18	-0.18	47.02	55.83	-8.81	0.0	0.1	Maldah	Maldah	SOUTH BENGAL.	
45	0	NH	NH	0.11	0.54	0.34	+0.20	+0.20	60.03	64.00	-12.97	0.0	0.3	Dinapore	Dinapore		
71	0	NH	NH	0.43	2.37	0.81	+1.56	+1.56	63.46	74.74	-11.28	0.0	0.6	Rangpur	Rangpur		
81	0.7	NH	0.00	0.20	2.54	0.70	+1.84	+1.84	120.37	111.70	+8.67	0.2	0.6	Jalpaiguri	Cooch Behar		
92	0.0	NH	0.05	0.19	2.83	0.73	+2.10	+2.10	131.65	128.68	-2.97	0.7	0.6	Darjeeling	Darjeeling Hill Tracts	SOUTH BENGAL.	
60	0	NH	NH	0.07	0.07	0.22	+0.00	+0.00	60.33	58.88	+1.45	0.0	0.3	Purneah	Purneah		
50	0	NH	NH	0.08	0.22	0.37	-0.15	-0.15	47.67	44.12	+3.55	0.0	0.3	Muzafferpore	South Bhagalpore		
50	0	NH	NH	0.03	0.50	0.23	+0.27	+0.27	50.00	45.04	+4.96	0.0	0.3	Durkanga	Durkanga		
57	1.0	NH	NH	0.04	0.15	0.55	-0.17	-0.17	49.07	47.28	+1.79	0.0	0.2	Motihari	Champaran	SOUTH BENGAL.	
55	0	NH	NH	0.03	0.12	0.20	-0.08	-0.08	40.37	45.70	-5.33	0.0	0.1	Chupra	Saran		
19	0	NH	NH	-	-	-	-	-	-	-	-	-	-	Debra	-		
20	0.1	NH	NH	0.03	0.03	0.34	-0.32	-0.32	38.05	41.12	-3.07	0.0	0.2	Buxar	Shahabad		
25	0	NH	NH	-	-	-	-	-	-	-	-	-	-	Arrah	-	SOUTH BENGAL.	
26	0.0	NH	NH	1.00	0.04	0.33	-0.35	-0.35	30.34	42.45	-12.11	0.0	0.3	Gya	Gya		
28	0	NH	NH	0.07	NH	0.74	-0.24	-0.24	26.61	43.23	-16.62	0.0	0.3	Bankipore	Patna		
29	0	NH	NH	0.00	NH	0.25	-0.10	-0.10	45.00	44.02	-0.98	0.0	0.2	Bhagalpore	South Bhagalpore		
30	0	NH	NH	0.11	0.20	0.40	-0.11	-0.11	33.41	51.20	-17.79	0.0	0.3	Dumka	South Pargannas	CHOTA NAGPORE.	
37	0.0	NH	NH	0.00	0.03	0.03	-0.24	-0.24	47.54	53.04	-5.50	0.0	0.3	Hazaribagh	Hazaribagh		
37	0	NH	NH	0.14	0.13	0.70	-0.56	-0.56	45.06	47.06	-2.00	0.0	0.4	Ranoli	Manbhum		
38	0	NH	NH	0.13	NH	0.00	-0.10	-0.10	60.00	51.24	-8.76	0.0	0.3	Chyabaga	Singbhum		

The figures in the column for the week are for the corresponding normal mean, and positive when greater. Under the head District observations of rainfall the normal means are given, and the actual for the week are given by 10. Under the head District observations of rainfall the normal means are given, and the actual for the week are given by 10. Under the head District observations of rainfall the normal means are given, and the actual for the week are given by 10.

## Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 23rd of March 1888.

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 15th May 1887.	Average rainfall from 15th May to date.
			Saturday, 12th March.	Sunday, 13th March.	Monday, 14th March.	Tuesday, 15th March.	Wednesday, 16th March.	Thursday, 17th March.	Friday, 18th March.	Number of rainy days.	of Rainfall week.				
N.W. Bengal.	Purba	Purba	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Khordah	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Bampur	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		False Point	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Pipli	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
	Cuttack	Jambhikpore	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Bunka	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Cuttack	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Kendrapara	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Jajpur	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
	Balasore	Bharatpala	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Salipora	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Chandoli	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Bhadrach	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
		Norah	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54
Midnapore	Midnapore	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Saugor Island	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Tundak	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Midnapore	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Chital	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
24 Parganas	Diamond Harbour	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Canning Town	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Alipore	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Barrackpore	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Dum-Dum	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Howrah	Howrah	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Mohesra	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Howrah	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Howrah	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Howrah	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Hooghly	Semra	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Hooghly	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Jahnnabad	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Hooghly	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Hooghly	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Culna	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Cutna	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Ranaganga	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Bankura	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Bankura	Bankura	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Bankura	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Bankura	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Bankura	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
Burdwan	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1	0.04	0.04	0.04	50.49	50.54	
	Burdwan														

## Statement of Rainfall in Bengal for the week ending Friday 6 p.m., the 23rd of March 1888—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total.		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 16th May 1887.	Average rainfall from 16th May to date.
			Sunday, 15th March.	Sunday, 15th March.	Monday, 16th March.	Tuesday, 17th March.	Wednesday, 18th March.	Thursday, 19th March.	Friday, 20th March.	Number of rainy days.	of Rainfall week.				
East Bengal—contd.	Naukhally	Gourmaddi	0.30							Nd	Nd	1.08	1.08	42.45	?
		Banphal	0.30							Nd	Nd	0.30	0.30	65.07	?
		Naukhally	0.30							1	0.30	2.75	2.44	77.03	113.08
	Farrukabad	Barishpore	0.10							1	0.10	4.01	2.20	70.00	113.04
		Ranganj								Nd	Nd	1.26	1.26	77.07	?
		Ranganj								Nd	Nd	0.11	0.11	68.00	?
	Dacca	Maadripore								Nd	Nd	1.08	1.08	38.00	38.78
		Furzedpore								Nd	Nd	1.55	1.55	60.00	60.71
		Goshundo								Nd	Nd	2.02	2.02	41.21	41.21
	Hill Tracts	Munshiganj								Nd	Nd	4.76	4.76	40.37	70.91
		Dacca								Nd	Nd	1.32	1.32	53.28	53.28
		Munshiganj								Nd	Nd	0.00	0.00	50.00	50.00
	Hill Tracts	Munshiganj								Nd	Nd	2.00	2.00	38.00	38.00
		Joydipore								Nd	Nd	3.18	3.18	55.72	55.72
	Hill Tracts	Agartala	0.20							1	0.20	2.00	2.00	53.21	53.21
		Gomti	0.20							1	0.20	3.57	3.57	53.07	53.07
		Gomti								Nd	Nd	3.55	3.55	40.14	40.14
	Hill Tracts	Kanchandrapore	0.20							1	0.20	6.81	6.81	58.54	58.54
		Kanchandrapore								Nd	Nd	3.10	3.10	42.02	42.02
	Hill Tracts	Kanchandrapore	0.20							1	0.20	3.94	3.94	35.83	35.83
		Kanchandrapore								Nd	Nd	2.23	2.23	30.70	30.70
		Kanchandrapore								Nd	Nd	2.60	2.60	52.70	52.70
	Hill Tracts	Kanchandrapore								Nd	Nd	3.10	3.10	35.83	35.83
		Kanchandrapore								Nd	Nd	2.23	2.23	30.70	30.70
		Kanchandrapore								Nd	Nd	2.60	2.60	52.70	52.70
	Hill Tracts	Kanchandrapore								Nd	Nd	3.10	3.10	35.83	35.83
		Kanchandrapore								Nd	Nd	2.23	2.23	30.70	30.70
		Kanchandrapore								Nd	Nd	2.60	2.60	52.70	52.70
	Hill Tracts	Kanchandrapore								Nd	Nd	3.10	3.10	35.83	35.83
		Kanchandrapore								Nd	Nd	2.23	2.23	30.70	30.70
		Kanchandrapore								Nd	Nd	2.60	2.60	52.70	52.70
	Hill Tracts	Kanchandrapore								Nd	Nd	3.10	3.10	35.83	35.83
		Kanchandrapore								Nd	Nd	2.23	2.23	30.70	30.70
		Kanchandrapore								Nd	Nd	2.60	2.60	52.70	52.70
	Hill Tracts	Kanchandrapore								Nd	Nd	3.10	3.10	35.83	35.83
		Kanchandrapore								Nd	Nd	2.23	2.23	30.70	30.70
		Kanchandrapore								Nd	Nd	2.60	2.60	52.70	52.70
North Bengal.	Pabna	Pabna								Nd	Nd	2.12	2.12	41.67	41.67
		Barisal								Nd	Nd	1.40	1.40	53.74	53.74
		Barisal								Nd	Nd	0.65	0.65	48.84	48.84
	Bogra	Sherpore								Nd	Nd	0.65	0.65	48.84	48.84
		Sherpore								Nd	Nd	0.65	0.65	48.84	48.84
		Sherpore								Nd	Nd	0.65	0.65	48.84	48.84
	Rajshahi	Rajshahi								Nd	Nd	0.65	0.65	48.84	48.84
		Rajshahi								Nd	Nd	0.65	0.65	48.84	48.84
		Rajshahi								Nd	Nd	0.65	0.65	48.84	48.84
	Maldah	Maldah								Nd	Nd	0.65	0.65	48.84	48.84
		Maldah								Nd	Nd	0.65	0.65	48.84	48.84
		Maldah								Nd	Nd	0.65	0.65	48.84	48.84
	Dinajpur	Dinajpur								Nd	Nd	0.65	0.65	48.84	48.84
		Dinajpur								Nd	Nd	0.65	0.65	48.84	48.84
		Dinajpur								Nd	Nd	0.65	0.65	48.84	48.84
	Rangpur	Rangpur								Nd	Nd	0.65	0.65	48.84	48.84
		Rangpur								Nd	Nd	0.65	0.65	48.84	48.84
		Rangpur								Nd	Nd	0.65	0.65	48.84	48.84
	Jalpaiguri	Jalpaiguri								Nd	Nd	0.65	0.65	48.84	48.84
		Jalpaiguri								Nd	Nd	0.65	0.65	48.84	48.84
		Jalpaiguri								Nd	Nd	0.65	0.65	48.84	48.84
	Cooch Behar	Cooch Behar								Nd	Nd	0.65	0.65	48.84	48.84
		Cooch Behar								Nd	Nd	0.65	0.65	48.84	48.84
		Cooch Behar								Nd	Nd	0.65	0.65	48.84	48.84
	Darjeeling Hill.	Darjeeling								Nd	Nd	0.65	0.65	48.84	48.84
		Darjeeling								Nd	Nd	0.65	0.65	48.84	48.84
		Darjeeling								Nd	Nd	0.65	0.65	48.84	48.84
	Furness	Furness								Nd	Nd	0.65	0.65	48.84	48.84
		Furness								Nd	Nd	0.65	0.65	48.84	48.84
		Furness								Nd	Nd	0.65	0.65	48.84	48.84
	North Bengal.	North Bengal								Nd	Nd	0.65	0.65	48.84	48.84
		North Bengal								Nd	Nd	0.65	0.65	48.84	48.84
		North Bengal								Nd	Nd	0.65	0.65	48.84	48.84
	Durruganga	Durruganga								Nd	Nd	0.65	0.65	48.84	48.84
		Durruganga								Nd	Nd	0.65	0.65	48.84	48.84
		Durruganga								Nd	Nd	0.65	0.65	48.84	48.84
	Maulabazar	Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
	Maulabazar	Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
	Maulabazar	Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
	Maulabazar	Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84
		Maulabazar								Nd	Nd	0.65	0.65	48.84	48.84

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 23rd of March 1888.—*conold.*

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 1st of May 1887.	Average rainfall from 1st of May to date.
			Saturday, 17th March.	Sunday, 18th March.	Monday, 19th March.	Tuesday, 20th March.	Wednesday, 21st March.	Thursday, 22nd March.	Friday, 23rd March.	Number of rainy days.	of Rainfall week.				
NORTH BENGAL— <i>concluded.</i>	Saran	Gopalgunge...	...	...	...	...	...	...	...	Nil	Nil	0.07	0.05	44.83	44.81
		Rowan...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.14	39.74	45.03
SOUTH BENGAL	Shahadad	Chuprah...	...	...	...	...	...	...	...	Nil	Nil	0.25	0.27	58.70	41.99
		Dunton...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.25	54.73	50.40
		Rubroon...	...	...	...	...	...	...	...	Nil	Nil	0.13	?	39.76	?
		Banarman...	...	...	...	...	...	...	...	Nil	Nil	0.30	0.30	41.98	41.87
		Arrah...	...	...	...	...	...	...	...	Nil	Nil	0.08	0.23	58.62	41.88
		Mohania...	...	...	...	...	...	...	...	Nil	Nil	0.20	0.20	41.74	40.98
		...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
	Gya	Aurnagabad...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.33	32.98	43.84
		Gya...	...	...	...	...	...	...	...	Nil	Nil	0.08	0.27	43.87	43.83
		Nawalish...	...	...	...	...	...	...	...	Nil	Nil	0.07	0.35	39.91	41.99
		Jehanabad...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.30	40.77	41.91
		Arwal...	...	...	...	...	...	...	...	Nil	Nil	?	?	41.13	?
		Imamnagar...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.01	?
		Sherrghali...	...	...	...	...	...	...	...	Nil	Nil	?	?	50.45	?
		Rajauli...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
		Pakri Barwan...	...	...	...	...	...	...	...	Nil	Nil	?	?	32.24	?
	Patna	Patna...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.27	37.17	40.02
		Dinapore...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.19	38.44	42.11
		Holur...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.27	38.54	43.04
		Harch...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.26	39.01	40.11
		Rickram...	...	...	...	...	...	...	...	Nil	Nil	?	?	40.05	?
		Husa...	...	...	...	...	...	...	...	Nil	Nil	?	?	38.54	?
	Monghyr	Begowah...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	40.08	40.31
		Monghyr...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.23	40.24	40.20
		Jamui...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.35	40.03	40.13
		Gupri...	...	...	...	...	...	...	...	Nil	Nil	?	?	42.03	?
		Shankarpur...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.58	?
	South Bhagalpur	Bhagalpur...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.23	41.23	41.13
		Kaika...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.30	39.03	41.97
		Kulung...	...	...	...	...	...	...	...	Nil	Nil	?	?	41.45	?
	Sonthal Permittah	Rajmohal...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.27	37.08	39.40
		Udala...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.30	40.56	43.76
		Pasour...	...	...	...	...	...	...	...	Nil	Nil	0.31	0.35	39.05	39.04
		Nya Doozha...	...	...	...	...	...	...	...	Nil	Nil	0.33	0.33	40.04	40.02
		Deokhar...	...	...	...	...	...	...	...	Nil	Nil	0.33	0.33	40.04	40.02
		Jamara...	...	...	...	...	...	...	...	Nil	Nil	0.19	0.31	40.34	40.37
		Sinra...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
		Namthal...	...	...	...	...	...	...	...	Nil	Nil	0.32	?	39.81	?
CHUTIA NAGPUR.	Bamra	Pachamba...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.25	42.00	40.05
		(Guridi)...	...	...	...	...	...	...	...	Nil	Nil	0.07	0.13	40.59	40.53
		Hazaribagh...	...	...	...	...	...	...	...	Nil	Nil	0.08	0.24	41.27	41.23
		Sontagurha...	...	...	...	...	...	...	...	Nil	Nil	?	?	40.45	40.45
		Mahuli Hills...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.60	39.60
		Jhoomur Hills...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.70	?
		Burhi...	...	...	...	...	...	...	...	Nil	Nil	0.13	?	39.10	?
		Chitra...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.46	?
		Karagaha...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.54	?
		Kamghur...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
	Lohardaga	Lohardaga...	...	...	...	...	...	...	...	Nil	Nil	0.42	?	37.80	?
		Bauchi...	...	...	...	...	...	...	...	Nil	Nil	?	?	38.38	38.05
		Paimow...	...	...	...	...	...	...	...	Nil	Nil	?	?	39.71	39.13
		Belli...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
		Haimat...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
		Hosseinabad...	...	...	...	...	...	...	...	Nil	Nil	0.39	?	39.20	?
		Gorant...	...	...	...	...	...	...	...	Nil	Nil	?	?	38.85	?
	Singbhum	Chynassa...	...	...	...	...	...	...	...	Nil	Nil	0.30	?	37.63	37.28
		Chakradhar...	...	...	...	...	...	...	...	Nil	Nil	0.06	?	41.27	?
		Ghatatila...	...	...	...	...	...	...	...	Nil	Nil	?	?	35.79	?
		Bukaragura...	...	...	...	...	...	...	...	Nil	Nil	?	?	41.15	?
	Manbhum	Purulia...	...	...	...	...	...	...	...	Nil	Nil	0.34	0.34	42.63	41.01
		Chandpur...	...	...	...	...	...	...	...	Nil	Nil	0.40	0.45	39.79	40.10
		Kuphath...	...	...	...	...	...	...	...	Nil	Nil	?	?	38.04	?
		Barraboom...	...	...	...	...	...	...	...	Nil	Nil	?	?	40.81	?
		Jhalda...	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?
		Chas...	...	...	...	...	...	...	...	Nil	Nil	0.13	?	?	?

Explanation.—Indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

Calcutta, the 27th March 1888.

# SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 23RD MARCH 1888.

THERE is little that calls for notice in the meteorology of the past week. The barometer was low at the commencement of the week, but was beginning to rise rapidly, and the showery, thundery weather of the previous week ceased on the 17th or 18th over the whole province. Thunder-storms occurred on the 17th in Orissa and the eastern and southern districts of East Bengal, and one or two local showers of little importance on the 18th. After that date the weather was fine throughout the week. The barometer rose until the 20th, when it was a tenth of an inch higher than on the 16th. On the 20th temperature commenced to increase rapidly in the interior, and the westerly winds down the Gangetic plain extended further and further eastwards into Bengal. These changes accompanied a rapid decrease of pressure during the remainder of the week, which varied in amount from  $\cdot 12''$  to  $\cdot 2''$ . On the 23rd the sea winds at the head of the Bay began to increase in strength, and slightly decreased the temperature and increased the humidity in South Bengal. Hot dry weather with clear skies prevailed over nearly the whole of the province from the 18th to the end of the week.

*Pressure.*—The barometric changes of the past week formed a single oscillation of the kind that are due mainly to increasing heat and temperature in Northern India. The barometer rose about a tenth of an inch from the 16th to the 20th and fell a sixth of an inch on the average of the whole province between the 20th and 23rd. The mean pressure of the week varied little from the normal, and was slightly in excess in all districts except Central Bengal, and Central and South Behar, where there was a small deficiency (nowhere exceeding  $0\cdot 2''$ ).

*Temperature.*—The temperature changes of the week corresponded closely to the pressure changes. The mean daily temperature was steady or increased slowly during the first-half of the week, but afterwards increased much more rapidly. The increase was in many cases shown more largely in the night than in the day temperatures. The highest temperatures of the week were in the great majority of cases recorded on the 23rd. The hottest part of the province during the past week, as defined by maxima temperatures exceeding  $101\frac{1}{2}^{\circ}$ , included the stations of Cuttack, Midnapore, Burdwan, Bankoorah and Raniganj. The mean temperature of the week, both night and day, was in excess. The mean daily temperature was on the average  $2^{\circ}$  in excess in South-West Bengal, Chutia Nagpur and South Behar;  $1\frac{1}{2}^{\circ}$  in Orissa, East and North Bengal, and was normal only in North Behar.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 23rd March 1888.

	Normal mean maxi- mum tem- perature for the week ending 23rd March, 1888.	Actual mean maxi- mum tem- perature for the week ending 23rd March, 1888.	Variation of actual mean from the nor- mal.	Normal mean mini- mum tem- perature for the week ending 23rd March, 1888.	Actual mean mini- mum tem- perature for the week ending 23rd March, 1888.	Variation of actual mean from the nor- mal.	Normal mean daily tempera- ture for the week ending 23rd March, 1888.	Actual mean daily tempera- ture for the week ending 23rd March, 1888.	Variation of actual mean from the nor- mal.
Cuttack ... ..	96.8	97.3	+0.5	73.0	76.0	+3.1	85.4	86.7	+1.3
Calcutta ... ..	90.8	92.7	+1.9	70.6	72.7	+2.1	80.7	82.7	+2.0
Dacca ... ..	91.0	92.0	+1.0	69.4	72.1	+2.7	80.2	81.9	+1.7
Burdwan ... ..	91.1	92.0	+0.9	69.5	70.8	+1.3	81.4	83.9	+2.5
Patna ... ..	92.0	92.8	+0.8	68.3	68.3	0.0	78.1	80.1	+2.0
Gya ... ..	95.1	96.3	+1.2	65.0	68.0	+3.0	80.4	82.5	+2.1
Purneah ... ..	92.4	90.7	-1.7	67.3	63.6	-3.7	76.6	77.1	+0.5
Hazaribagh ... ..	89.7	91.5	+1.8	64.4	66.0	+1.6	77.1	79.1	+2.0
Darjeeling ... ..	58.7	54.3	-4.4	44.4	43.3	-1.1	51.6	49.8	-1.8

*Rainfall.*—The only important rainfall of the week occurred as local thunder-showers on the 17th and 18th in Orissa and the east and south-east districts of East Bengal. Orissa received an average of  $0\cdot 34$  inch ( $\cdot 09$  inch more than the average rainfall of the week) and East Bengal an average of  $\cdot 29$  inch, almost exactly half the normal mean rainfall of the week.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province the week ending Friday the 23rd of March 1888:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 18th May 1887.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	102.8	67.4	80.0	53.8	82.9	+1.4	0.34	0.23	+0.09	0.7	0.8	+0.1	0.44	0.34	40.88	55.09
South-West Bengal	103.4	63.2	85.0	70.8	83.4	+1.0	0.02	0.25	-0.23	0.1	0.5	-0.4	0.96	0.72	49.35	54.18
East Bengal	94.1	65.4	88.2	71.4	79.8	+1.8	0.29	0.59	-0.30	0.4	0.1	-0.5	3.26	1.05	51.23	78.31
North Bengal	98.8	57.5	90.8	64.6	71.7	+1.5	00.1	0.25	-0.24	0.1	0.5	-0.4	1.33	0.31	75.58	71.30
North Behar	93.9	62.8	80.2	62.7	76.4	-0.2	Nil	0.06	-0.05	0.0	0.3	-0.3	0.50	0.27	53.07	49.23
South Behar	100.1	60.0	83.3	66.2	80.8	+2.1	Nil	0.88	-0.08	0.0	0.3	-0.3	0.08	0.31	42.83	44.78
Cooch Nagpur	94.0	61.9	81.3	60.8	79.1	+2.3	Nil	0.12	-0.12	0.0	0.4	-0.4	0.05	0.33	46.58	50.07

\* Chyabana not included.

METEOROLOGICAL OFFICE, BENGAL;

J. ELIOT,

The 27th March 1888.

for Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 18th to 24th March 1888.

MONTH.	Date.	TEMPERATURE.				Mean wet bulb.	HYGROMETRY.			Rain.
		Mean.	Maximum.	Range.	Minimum.		Vapour tension.	Dew point.	Humidity.	
1888.		°	°	°	°	°	Inches.	°	%	Inches.
March	18th	82.8	95.0	21.2	73.8	74.8	.766	70.8	67	Nil.
"	19th	82.9	95.0	21.0	74.0	75.5	.784	71.9	69	"
"	20th	83.3	96.0	21.3	74.7	76.7	.831	73.7	73	"
"	21st	83.6	97.6	25.0	72.0	74.1	.716	69.2	67	"
"	22nd	85.1	99.0	24.2	74.8	73.8	.683	67.9	67	"
"	23rd	85.9	100.2	26.6	73.6	70.1	.525	60.3	61	"
"	24th	84.8	101.2	23.6	72.6	74.7	.725	69.6	61	"

The mean temperature of the seven days

... 84.1

The extreme variation of temperature

... 28.2

The maximum temperature

... 101.2

The mean relative humidity

... 69

Inches.

The total fall of rain from 18th to 24th March 1888

... Nil

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

JOHN ELIOT,

The 26th March 1888.

Offg. Meteorological Reporter to the Govt. of India.



### MEMORANDUM.

The birth and death returns of the principal Municipalities in Bengal, for the week ending 10th March 1888, exhibit the following results :—

1. That births were registered in the above Municipalities at the rates of 19 per 1,000 of population, as opposed to very nearly the same proportion, viz. 19·3 per 1,000 in the preceding week ending 3rd March, and deaths at 26·1 against 21·7 per 1,000, indicating a considerable improvement in their registration.

2. That the undermentioned Municipalities returned the highest proportions of births and deaths :—

Births.			Deaths.		
		Ratio per mille.			Ratio per mille.
Beaulcah	...	49·9	Suburbs of Calcutta	...	54·8
Monghyr	...	31·6	Serampore	...	43·2
Durbhanga	...	29·9	Beaulcah	...	34·2
			Durbhanga	...	31·5
			Puri	...	31·5
			Purneah	...	31·1
			Comillah	...	30·8

3. That the rates of mortality from the principal diseases, contrasted with the similar information for the preceding week, stood as follows :—

						Ratio per mille during the weeks ending—	
						10th March 1888.	3rd March 1888.
Cholera	...	...	...	...	...	5·1	3·6
Small-pox	...	...	...	...	...	1	1
Fever	...	...	...	...	...	10·3	8·7
Bowel-complaints	...	...	...	...	...	2·8	2·9
Injury	...	...	...	...	...	2	2
Other causes	...	...	...	...	...	7·6	6·2

indicating chiefly that the mortality from cholera, fever and the maladies classed under the head of "Other causes," had increased to a noticeable extent.

4. That of the abovementioned diseases, cholera, fever and "other causes" proved conspicuously fatal in the following Municipalities, the other diseases exhibiting no special local severity :—

Cholera.			Fever.			Other causes.		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Suburbs of Calcutta	...	20·5	Beaulcah	...	28·9	Serampore	...	17·7
Narainganj	...	16·6	Kishnaghur	...	21·6	Puri	...	16·8
Serampore	...	7·8	Hughli	...	22·8	Suburbs of Calcutta	...	11·8
Howah	...	5·7	Purneah	...	20·8			

5. That the death-rates in relation to Sex, Class and Age were returned at the rates indicated below :—

According to Sex.			According to Class.			According to Age.		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Males	...	28·5	Christians	...	21·7	Under 1 year	...	206·3
Females	...	23·5	Hindus	...	24·7	1 and under 5 years	...	28·0
Ratio of male deaths to every 100 female deaths	137		Mahomedans	...	25·7	5 " 10 "	...	13·1
			Other classes	...	36·4	10 " 15 "	...	15·8
						15 " 20 "	...	17·8
						20 " 30 "	...	14·8
						30 " 40 "	...	21·0
						40 " 50 "	...	18·9
						50 " " "	...	27·3
						50 years and upwards	...	74·9

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,

The 26th March 1888.

Offg. Sanitary Commissioner for Bengal.

Statement showing the Results of the Registration of Births and Deaths in the Principal Municipalities in Bengal during the week ending 10th March 1888.

DISTRICTS.	NAMES OF MUNICIPALITIES.	POPULATION.										BIRTHS.										MORTALITY ACCORDING TO—										SEX.
		MALES.					FEMALES.					Total.					Total.					DISEASE.					RATIO PER 1,000 OF POPULATION FOR					Ratio of male deaths to every 100 female deaths.
		NUMBER OF—					RATIO PER 1,000 OF POPULATION PER ANNUM.					RATIO PER 1,000 OF POPULATION PER ANNUM.					RATIO PER 1,000 OF POPULATION PER ANNUM.					RATIO PER 1,000 OF POPULATION PER ANNUM.					RATIO PER 1,000 OF POPULATION PER ANNUM.					Ratio of male deaths to every 100 female deaths.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
Bardhaman	...	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	10,000	10,000	20,000	...

The number of the natives was not reliable owing to the Europeans being at a minimum to that month. The number of the natives was not reliable owing to the Europeans being at a minimum to that month. The number of the natives was not reliable owing to the Europeans being at a minimum to that month.

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## PUBLIC WORKS DEPARTMENT, BENGAL.

## IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1887-88.

Areas leased for Irrigation up to end of January 1888.

CIRCLE.	DISTRICT.	CANAL.	Esti- mated full dis- charge.	Average discharge in month.	Discharge utilised.	Approx. area of land irrigated during the year up to the end of the month.	Approx. area of land irrigated under the year up to the end of the year.	Five years all crops.	Five years Kharif.	DETAILS OF AREAS LEASED.						RAINFALL, 1887-88.		RAINFALL, 1888-89.		REMARKS.
										ANNUAL LEASES.						Grand Total.	Up to end of month.	During month.	Up to end of month.	
										Kharif.	Rabi.	Sugar- cane.	Bhadol. weather.	Total.	Acres.					
BENGAL.	Calcutta	Taldanda, 1st Reach.	1,342	10	0.08	7,084	4,249	7,084	7,084	46	535	171	.....	.....	771	165,613	.....	.....	.....	80 days discharging. 10 days discharging.
		Taldanda, 2nd Reach.	568	10	0.08	19,703	17,377	22,343	22,343	37	484	8	.....	.....	430	22,343	48,655	53,25	53,25	
		Machung	778	300	123	37,822	31,333	41,372	41,372	9	.....	19	.....	.....	9	41,372	31,78	0.20	0.20	
		Kendrapara	1,067	28-83	13-54	608	591	705	705	14	.....	.....	.....	.....	14	705	30-45	0.20	0.20	
		Gouri	872-82	84	4	8,053	6,004	9,217	9,217	34	.....	.....	.....	.....	34	9,217	30-45	0.20	0.20	
		Pattamondri	885	.....	.....	13,673	13,611	14,095	14,095	.....	.....	.....	.....	.....	.....	14,095	.....	.....	.....	
		High Level, Range I.	008	.....	.....	1,518	429	710	710	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		High Level, Range II.	727-16	2-90	2-90	9,710	5,982	7,722	7,722	8	.....	92	.....	.....	100	7,722	50-85	0.54	0.54	
		High Level, Range III.	727-16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Total	.....	.....	.....	10,268	79,776	104,212	104,212	46	535	171	.....	.....	771	165,613	.....	.....	.....	
BENGAL.	Howrah	Total of the corresponding period of last year.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80 days discharging. 10 days discharging.
		Minapore	1,411	48	.....	57,060	61,610	57,060	57,060	1,162	.....	.....	.....	.....	1,162	57,060	53,25	0.04	0.04	
		Prachinab	852	26	.....	3,579	5,788	4,704	4,704	.....	.....	.....	.....	.....	.....	3,579	53,25	0.04	0.04	
		Tal Beshar	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Range I and II.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Total	.....	.....	.....	61,639	68,043	63,258	63,258	1,162	.....	.....	.....	.....	1,162	64,450	.....	.....	.....	
		Total of the corresponding period of last year.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Shahabul	4,342	1,411	03	80,369	21,770	17,293	17,293	3,318	2,672	225	43	43	6,350	21,770	1,08	1.53	1.53	
		Buxar	1,236	460	153	62,005	61,644	44,344	44,344	12,331	4,333	1,275	102	1,000	2,380	61,644	38,71	1.53	1.53	
		Palma and	1,660	748	472	140,759	132,021	105,150	105,150	1,388	1,013	1,622	1	6,800	23,185	131,314	38,71	1.53	1.53	
BENGAL.	Patna	Palma and	1,408	591	293	60,752	45,317	38,719	38,719	14,461	1,565	417	75	15	16,636	13,312	47-43	1.67	1.67	80 days discharging. 10 days discharging.
		Total	.....	.....	.....	316,324	298,444	276,359	276,359	43,341	15,680	3,891	224	9,313	72,059	276,359	.....	.....	.....	
		Total of the corresponding period of last year.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
		Grand Total	.....	.....	.....	477,286	416,592	294,300	294,300	44,749	16,246	4,062	224	9,313	74,532	416,592	.....	.....	.....	
		Grand Total of the correspond- ing period of last year.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
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A. D. MCARTHUR, Major, R.E.,  
Under-Secretary to the Govt. of Bengal.

28th March 1888.

**CIRCULAR AND EASTERN CANALS.**

*Approximate Return of Traffic for the week ending Saturday, the 24th March 1888, as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 24TH MARCH 1888.			WEEK ENDING SATURDAY, THE 24TH MARCH 1887.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ... ..	728	2,58,840	4,597	947	3,49,325	5,970
Jute ... ..	57	35,050	604	59	40,025	750
Firewood ... ..	189	85,425	1,309	142	68,750	902
Other articles ... ..	841	2,26,350	3,462	1,032	2,90,435	4,136
Total ... ..	1,815	6,05,665	9,972	2,180	7,48,435	12,157

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 1,513½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	246,878*	2,79,248 12 0*	25,41,001 10	5,82,152 14 0	22,000 7 0	8,84,043 1 0	65,370	99,390†	1,64,760
Or per mile of railway ...	163 7 7	184 7 7	16 7 7	388 0 3	14 15 0	584 0 4	43 2	65 3	108 5
For previous 10 weeks of half-year ...	2,705,600	33,26,380 15 0	2,78,75,216 20	67,48,605 11 3	2,21,348 14 4	1,01,01,324 11 7	68,9,844	1,004,721‡	1,731,365
Total for 11 weeks ...	2,952,478	36,05,628 15 0	3,04,16,217 30	73,30,710 12 5	2,43,648 5 3	1,10,75,897 13 1	75,2,220	1,104,112	1,879,332
COMPARISON.									
Total for corresponding week of previous year ...	234,893	3,52,510 5 0	25,56,361 20	6,78,336 9 5	18,352 11 8	10,50,302 13 5	70,728	708,677	1,01,80
Per mile of railway corresponding week of previous year ...	155 1 1	233 1 1	16 7 7	446 15 5	12 6 7	691 7 1	46 3	46 3	91 8
Total to corresponding date of previous year ...	2,853,734	33,04,415 7 10	2,89,27,000 30	74,03,952 5 4	2,04,836 7 0	1,09,75,254 2 8	751,700	1,224,380	1,976,146

\* The decrease in coaching earnings is principally in pony and troops traffic.

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 18TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 17TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
1,510	10,50,302	691	1,513½	8,84,043	584	1,512½	4,52,64,171	597	1,516½	4,45,48,202	588	.....	7,05,969

## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,492	8,840 1 0	25,410 30	2,185 8 0	51 6 0	11,082 15 0	1,870	632	2,502
Or per mile of railway ...	271	154 10 5	444 20	38 3 3	0 14 5	193 12 1	32 7	11 0	43 7
For previous 10 weeks of half-year ...	140,964	78,450 5 0	3,08,772 0	10,843 11 0	406 15 0	90,139 2 0	10,320	8,642	18,962
Total for 11 weeks ...	156,456	87,332 6 0	3,34,182 30	12,031 3 0	468 5 0	1,07,621 14 0	20,242	9,474	29,716
COMPARISON.									
Total for corresponding week of previous year ...	16,093	10,415 14 5	26,502 20	2,100 4 5	50 0 0	13,063 3 5	1,707	1,907	3,614
Per mile of railway corresponding week of previous year ...	312	182 4 6	467 30	35 12 5	0 15 8	238 13 7	29 8	32 7	62 5
Total to corresponding date of previous year ...	150,566	85,638 1 4	3,07,871 0	11,931 4 9	400 13 5	1,21,210 5 4	10,208	9,087	19,295

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 18TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 17TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
57½	13,662	239	57½	11,083	194	57½	6,25,816	103	57½	4,45,870	170	.....	2,200

## DILDARNAGAR-GHAZIPUR STATE RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 12 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	2,607	Rs. 425 7 0	Mds. 2,210 30	Rs. 472 2 0	Rs. 10 12 0	Rs. 482 9 0	300	133	433
Per mile of railway	217 2	35 11 3	184 2 0	39 3 0	0 13 4	40 15 1	25	11	36
For previous 10 weeks of half-year	24,943	4,801 4 0	2,24,223 0	4,877 13 0	94 15 0	4,971 8 0	2,305	1,210	3,515
Total for 11 weeks	31,510	5,319 11 0	2,46,433 30	5,349 15 0	104 11 0	5,453 6 0	2,735	1,443	4,178
COMPARISON.									
Total for corresponding week of previous year	2,680	436 11 0	19,187 14	571 3 0	9 12 0	580 3 0	339	154	493
Per mile of railway corresponding week of previous year	223 3	36 3 3	159 7 0	47 8 7	0 13 1	48 12 11	28	12	40
Total to corresponding date of previous year	22,746	4,422 6 2	2,17,131 51	4,659 0 0	83 11 9	4,742 11 11	2,411	1,283	3,694

Approximate Statement of gross receipts of the Dildarnagar-Ghazipur State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 17th MARCH 1887.			RECEIPTS FOR WEEK ENDING 17th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1886 TO 17th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 17th MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Rs.	
12	Rs. 1,018	85	12	Rs. 911	70	12	Rs. 40,374	77	12	Rs. 46,362	77	Rs. 74	

## SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 74 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	6,317	Rs. 4,752 5 0	Mds. 83,645 34	Rs. 3,762 6 0	Rs. 137 11 0	Rs. 4,889 6 0	764	1,754	2,518
Per mile of railway	85 4	63 8 7	1,118 1 0	50 4 0	1 13 6	65 10 16	10	23	33
For previous 10 weeks of half-year	60,298	37,500 7 0	6,04,972 20	45,310 0 0	1,767 1 0	47,077 1 0	7,022	15,295	22,317
Total for 11 weeks	66,815	42,258 12 0	6,88,618 16	49,072 15 0	1,905 2 0	50,977 15 0	7,786	17,517	25,303
COMPARISON.									
Total for corresponding week of previous year	6,152	4,760 13 4	1,33,123 30	3,816 13 0	133 11 3	4,709 5 7	691	1,691	2,382
Per mile of railway corresponding week of previous year	81 8	63 8 3	1,799 0 0	51 6 5	1 13 10	62 10 6	9	23	32
Total to corresponding date of previous year	63,311	47,974 13 7	12,00,961 30	50,808 3 0	1,143 3 0	51,951 6 1	8,220	14,631	22,851

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 17th MARCH 1887.			RECEIPTS FOR WEEK ENDING 17th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1886 TO 17th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 17th MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Rs.	
74	Rs. 3,707	110	74	Rs. 3,822	116	74	Rs. 3,50,785	106	74	Rs. 4,25,634	116	Rs. 84,909	



## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated)	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,483	5,006 15 0	2,213 0	255 13 0	6 6 0	5,006 12 0	978	90	1068
Or per mile of railway ...	.....	224 4 0	.....	11 7 11	2 4 4	224 2 0	.....	.....	.....
For previous 10 weeks of half-year ...	200,070	53,402 10 0	20,102 30	3,051 11 0	61 13 0	50,560 2 0	9,012	800	9,812
Total for 11 weeks ...	224,502	58,530 9 0	22,110 30	3,217 8 0	67 13 0	52,154 14 0	9,990	890	10,880
COMPARISON.									
Total for corresponding week of previous year ...	16,936	4 7	8,797 20	303 10 0	5 10 0	4,639 0 5	929	39	968
Per mile of railway corresponding week of previous year ...	.....	913 9 7	.....	13 10 4	0 4 1	226 8 0	.....	.....	.....
Total to corresponding date of previous year ...	221,034	57,881 5 8	22,472 10	3,053 2 0	74 0 0	51,904 13 8	10,532	618	11,150

Approximate Statement of gross receipts of the Tarkeessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 18TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 10TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
22½	5,040	227	22½	5,093	226	22½	2,37,713	214	22½	2,55,343	230	17,631	.....

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K. AND D., AND ARHAM-BEHAR SECTIONS.)

Approximate Return of Traffic for week ended 10th March 1888, on 676 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steamboat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	152,423	70,810 0 0	4,50,644 0	77,280 0 0	11,372 0 0	1,08,542 0 0	24,763	25,601	50,454
Or per mile of railway ...	100	118 0 0	673 0	115 0 0	2 0 0*	231 0 0	.....	.....	.....
For previous 9 weeks of half-year ...	1,188,628	6,51,917 0 0	61,01,005 0	8,78,323 0 0	1,36,802 0 0	16,05,927 0 0	200,604	203,894	404,498
Total for 10 weeks ...	1,721,051	7,30,927 0 0	66,48,009 0	9,55,584 0 0	1,47,904 0 0	18,31,479 0 0	225,454	229,480	454,934
COMPARISON.									
Total for corresponding week of previous year ...	141,207	65,421 0 0	4,30,210 0	61,190 0 0	11,482 0 0	1,38,088 0 0	20,420	18,600	39,020
Per mile of railway corresponding period of previous year ...	233	108 0 0	710 0	101 0 0	2 0 0*	211 0 0	.....	.....	.....
Total to corresponding date of previous year ...	1,427,175	6,79,902 0 0	58,16,692 0	8,60,612 0 0	1,32,630 0 0	16,82,346 0 0	221,411	221,964	443,375

\* Including steamer earnings.

† Includes 10,000 monthly season tickets.

## FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 11TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 10TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
■	1,38,096	223	676	1,35,643	246	606	70,87,414	200	647	91,31,910*	238	11,44,896	.....

\* Audited up to 31st December 1887.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 10th March 1888, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	25,629	3,903 0 0	62,335 0	6,892 0 0	40 0 0	18,543 0 0	3,198	1,752	5,250
per mile of railway ...	205	79 0 0	500 0	54 0 0	...	133 0 0	...	...	...
for previous 9 weeks of half-year ...	231,520	31,891 0 0	4,33,526 0	37,773 0 0	660 0 0	1,80,323 0 0*	31,375	15,600	46,975
Total for 10 weeks ...	257,149	35,794 0 0	4,95,861 0	44,565 0 0	700 0 0	1,98,866 0 0	34,573	17,352	52,225
COMPARISON.									
Total for corresponding week of previous year ...	25,978	4,340 0 0	45,686 0	2,972 0 0	31 0 0	12,343 0 0	3,503	1,707	5,210
per mile of railway corresponding period of previous year ...	208	75 0 0	365 0	24 0 0	...	100 0 0	...	...	...
Total to corresponding date of previous year ...	239,176	37,078 0 0	3,14,020 0	20,845 0 0	542 0 0	1,08,805 0 0	31,518	16,004	47,522

\* Audited up to week ending 14th January 1888.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 12TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
125	Rs. 12,543	Rs. 99	125	Rs. 10,041	Rs. 131	125	Rs. 5,37,852	68	125	Rs. 6,30,975*	103	Rs. 93,120	.....

\* Audited up to week ending 14th January 1888.

## DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 10th March 1888, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. c.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,062	4,817 0 0	3,625 0	800 0 0	80 0 0	5,567 0 0	2,111	963	3,164
per mile of railway ...	152	56 0 0	65 0	9 0 0	1 0 0	65 0 0	...	...	...
for previous 9 weeks of half-year ...	122,950	45,076 0 0	1,63,412 0	14,793 0 0	618 0 0	61,583 0 0	18,755	8,848	27,292
Total for 10 weeks ...	136,012	50,587 0 0	1,67,037 0	15,593 0 0	708 0 0	67,150 0 0	20,905	9,811	30,286
COMPARISON.									
Total for corresponding week of previous year ...	12,498	4,474 0 0	7,691 0	805 0 0	291 0 0	5,758 0 0	2,354	940	3,177
per mile of railway corresponding period of previous year ...	144	52 0 0	82 0	12 0 0	3 0 0	67 0 0	...	...	...
Total to corresponding date of previous year ...	128,577	40,020 0 0	2,27,638 0	19,811 0 0	2,279 0 0	68,119 0 0	21,051	11,683	33,537

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 12TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 12TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
86	Rs. 1,300	Rs. 15	86	Rs. 1,300	Rs. 15	86	Rs. 1,30,430	Rs. 15	86	Rs. 1,30,360*	Rs. 15	Rs. 20,830	.....

\* Audited up to week ending 14th December 1887.

## ASSAM-BEHAR STATE RAILWAY.

(PUNJAB SECTION.)

Approximate Return of Traffic for week ended 10th March 1888, on 39 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	3,289	1,030 0 0	28,822 0	2,134 0 0	15 0 0	3,514 0 0	545	540	1,085
Or per mile of railway	83	27 0 0	711 0	53 0 0		90 0 0			
For previous 9 weeks of half-year	26,681	9,304 0 0	1,84,721 0	17,396 0 0	133 0 0	27,122 0 0	4,914	4,914	9,828
Total for 10 weeks	30,000	10,334 0 0	2,13,543 0	20,534 0 0	148 0 0	30,634 0 0	5,459	5,424	10,883
COMPARISON.									
Total for corresponding week of previous year									
Per mile of railway corresponding period of previous year									
Total to corresponding date of previous year									

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Assam-Bihar State Railway.

RECEIPTS FOR WEEK ENDING 10TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 10TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.			Rs.						Rs.			
	Nil		30	3,512	90		Nil		30	1,17,702	63	1,17,702	

\* Audited up to week ending 31st December 1887

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for the week ending 17th March 1888, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	2,773	1,506 7 0	10,876 20	871 0 0	18 0 0	2,405 7 0	509	254	763
Or per mile of railway	100	54 4 0	619 0	31 15 0	0 11 0	76 14 0			
For previous 10 weeks of half-year	31,554	12,438 8 0	1,39,005 20	9,861 0 0	236 0 0	22,590 8 0	5,090	3,904	8,994
Total for 11 weeks	34,327	13,945 5 0	2,07,822 0	10,732 0 0	314 0 0	24,080 8 0	5,599	4,318	9,917
COMPARISON.									
Total for corresponding week of previous year	2,773	1,031 15 11	25,186 0	1,475 15 0	74 14 10	2,552 13 0	509	535	1,044
Per mile of railway corresponding week of previous year	100	37 14 0	924 0	54 2 0	2 12 0	64 19 0			
Total to corresponding date of previous year	31,554	12,702 14 11	1,68,174 30	9,103 8 0	305 7 4	22,200 14 3	5,073	4,303	9,376

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 10TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.			Rs.						Rs.			
27½	2,588	66	27½	2,405	77	27½	64,775	68	27½	2,405	68	1,400	

## TIRHOOT STATE RAILWAY.

Approximate Return of Traffic for the week ending 17th March 1888, on 250 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 250 miles open	88,434	Rs. A. P. 14,017 0 0	Mds. S. 2,15,494 10	Rs. A. P. 21,102 0 0	3,133 13 10	20,815 14 0	6,100	7,800	13,915
Or per mile of railway	148	57 10 0	862 0	84 15 0	3 3 0	143 11 0	.....	.....	.....
For previous 10 weeks of half-year	433,312	1,75,518 0 4	20,77,481 90	2,11,043 6 5	33,440 2 2	4,25,008 2 0	60,808	85,315	146,123
Total for 11 weeks	472,367	1,90,436 0 0	22,92,916 0	2,35,500 0 0	36,880 0 0	4,61,822 0 0	72,914	93,125	166,039
COMPARISON.									
Total for corresponding week of previous year on 244 miles open	85,083	13,060 12 11	1,23,805 30	12,959 5 0	4,065 0 11	30,086 2 10	5,801	5,030	10,830
Per mile of railway corresponding week of previous year	142	53 1 0	508 0	52 11 0	8 10 0	114 6 0	.....	.....	.....
Total to corresponding date of previous year	612,005	1,86,187 0 0	17,81,886 0	1,77,400 16 0	34,084 1 4	3,78,021 5 1	62,702	61,320	124,022

\* Steam-haul earnings excluded in calculating "Total earnings per mile of Railway."

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 17TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 10TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	
246	Rs. 80,086	Rs. 123	250	Rs. 30,914	Rs. 123	246	Rs. 15,40,700	Rs. 123	250	Rs. 11,69,486	Rs. 140	Rs. 2,22,726	.....

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 10th March 1888	...	...	8,802
Corresponding week last year	...	...	6,032
Increase	...	...	2,770
Receipts from 1st January to 10th March 1888	...	...	71,041
From 1st January to 12th March 1887	...	...	59,393
Increase	...	...	11,648
Miles open, week ending 10th March 1888	...	...	Miles. 51
Corresponding week last year	...	...	51
Receipts per mile open, week ending 10th March 1888	...	...	Rs. A. P. 172 9 5
Corresponding week last year	...	...	118 1 4
Increase	...	...	53 8 1

DARJEELING, the 21st March 1888.

H. BRIDGES, Acting Secretary, D.-H. Ry.



# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, APRIL 4, 1888.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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## RESOLUTION ON THE OPIUM ADMINISTRATION REPORT FOR 1886-87.

### REVENUE DEPARTMENT—MIS. REVENUE.

*Calcutta, the 29th March 1888.*

#### RESOLUTION.

#### READ—

A letter No. 61B, dated 30th January 1888, from the Officiating Secretary to the Board of Revenue, submitting the reports of the Opium Agents of Behar and Benares for the year 1886-87.

As there was a considerable stock of opium in hand at the commencement of the year, the Agents were requested to refrain from increasing production by adding to the area under cultivation. The present report shows that these instructions have been duly carried out, the land engaged for, 919,852 bighas, corresponding as nearly as possible with that entered in the returns of 1885-86. The Agents took advantage of the cessation of the work of extension to concentrate their operations in the districts where most profit can be obtained, to get rid of outlying stations, to weed out unsatisfactory cultivators, including those who have engaged to sow indigo on the land they also offer for opium, and in some instances to stop cultivation in the immediate neighbourhood of towns, where exceptional opportunities exist for smuggling. This is a subject to which the Lieutenant-Governor desires to draw the special attention of the Board and of officers of the Opium Department, with a view to the more general introduction of the methods which have been applied with success in some localities. When the main object was to increase the reserve, exhausted by the meagre results of indifferent years, it was impossible to insist upon the selection for opium of the best land, or of that most conveniently situated.

But now that officers have time to devote to the subject, every effort should be made to effect the settlement to the greatest advantage by the judicious selection of areas and of cultivators. The ryots are eager to enter into engagements, and there is thus an opportunity of exercising a choice by expanding cultivation in one place, while contracting it in another. There is also a considerable margin for the increase of production generally, should this be found desirable. The notes of Mr. Cadell, lately officiating as the Benares Agent, show that he rendered valuable services in this matter, to which Mr. Rivett-Carnac has also paid intelligent attention.

2. The outturn was not altogether satisfactory, being 1,07,577 maunds against 1,21,499 maunds in the previous year, and 1,33,803 maunds in 1884-85. The decrease appears due in the Benares Agency to the fact that about 2·34 per cent. of the area for which settlements were concluded was never in fact cultivated, the ryots being discouraged by the failure of the first sowings; while in the Behar Agency the yield was small, the hot winds having dried up the poppy juice. The average produce per bigha was 5 seers 3 chittacks and 2 katchas in Benares; 4 seers 5½ chittacks in Behar. The deficiency in Behar was to some extent a surprise, as the plants were well grown; it was not discovered until the lancing of the poppy disclosed the scantiness of the juice.

3. The low consistence of Benares opium having been a subject of comment in the Resolutions on the annual reports of the last two years, it is satisfactory to observe that during the last season a great improvement has been effected. The Agent states that the quality of the drug, as shown by the factory assay, was good, and that in no year, except the exceptional season of 1883-84, has the proportion of good serviceable opium been larger. This statement is altogether borne out by the following figures, which show how the opium has been classified:—

SEASONS.	Class XXX.	Class XX.	Class X.	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.
	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.
1885-86	515 6 94	2,082 11 1	5,296 38 8	9,338 29 10	14,302 10 14	13,699 23 94	11,423 39 3	5,590 35 8	3,181 17 8
1886-87	270 31 13	2,703 35 11½	9,041 5 8	16,397 15 2	15,890 2 10½	8,571 8 6½	3,040 24 8	702 30 12	139 6 15

The following remarks of the Officiating Opium Agent are commended to the attention of officers of the department as indicating what improvement can be effected by attention to the quality of the opium produced:—

"The greatest improvement has taken place in Basti where, owing to Mr. Luard's successful administration, the quality of opium sent up this year has been better than in any previous year, and it may be hoped that Basti, so long notorious for the poor quality of its opium, has now finally emerged from the list of divisions which habitually send up opium of indifferent quality. The history of this division and of its neighbour, Gorakhpur, shows what care and knowledge can achieve. In former days Gorakhpur was distinctly below the average of the Agency; it now stands *facile princeps* in the quality of its opium. Indeed, as the great bulk of it is of a higher consistence than the provision standard of this Agency, it seems to be worthy of consideration whether the Gorakhpur opium, which comes to Ghazipur *via* Bankipur, should not be sent direct to Patna.

The general quality of the opium sent up for manufacture is not discussed in the Behar report—an omission which may with advantage be supplied in future years. It appears, however, that unusual strictness was exercised in assaying opium at the factory.

4. The outstanding balances amount to Rs. 16,435, a sum which must be considered small as compared with the magnitude of the advances made, which exceed two hundred lakhs of rupees a year. The success of Opium Officers in effecting realizations deserves commendation, and compares favourably with the results obtained in other branches of the administration. But there are some exceptions to the good results generally obtained in this respect, and further explanation is required of the statement that "the heavy balance in Tirhoot, aggregating Rs. 9,635-9-1, has not been recovered owing to a misunderstanding of Mr. D'Oyly's orders by the Sub-Deputy Opium Agent, and may be irrecoverable."

5. There were 1,134 prosecutions under the opium laws during the year, against 1,265 in 1885-86 and 1,928 in 1884-85. The falling off has been in the Behar Agency, where new rules were introduced under the orders of Government to

prevent malicious or frivolous accusations. Three important cases of smuggling from Nepal were detected. The subject received special attention in the Benares Agency, and the remarks of Mr. Cadell, who has had very exceptional opportunities for observation, will doubtless receive the careful consideration of the Board. He observes—

“The most notable instance of restriction round large towns is the closing of poppy cultivation in the outskirts of Lucknow. The Commission has expressed the opinion that this measure was ‘an unnecessary step,’ but the effect of it on the consumption of licit opium has been unquestionable, for the sales have increased from less than 40 maunds in 1876-77 to more than 124 maunds in 1885-86; and where the average outturn is insufficient, there can be little question that cultivation near large cities should be closed at once, and further measures in the same direction have been taken during the year under report in the neighbourhood of Benares, Cawnpur, and Moradabad, while the abandonment of poppy cultivation in the Muttra district and in the neighbourhood of Agra has necessarily rendered smuggling into these towns more difficult than before. And even where the outturn was good, as it unquestionably was round Lucknow, there seems to be no advantage in maintaining it when land yielding an equally good outturn can be got elsewhere.

“A very satisfactory proof that the evil of smuggling is largely restricted in these provinces is furnished by the substantial revenue from opium excise obtained in the revenue divisions, which are worst in this respect, when compared with that of Patna—the only division in the Lower Provinces with which, for obvious reasons, comparison is possible:—

DIVISION.	Total population.	Mahomedan population.	Licit opium consumed.	Total excise revenue from opium.
			Mds. s. c.	Rs. a. p.
Benares ... ..	9,820,728	1,056,351	232 31 0	1,48,976 0 0
Faizabad ... ..	3,20,393	436,337	36 33 0	22,928 0 0
Bai Barelly ... ..	2,750,804	262,886	19 39 0	12,784 0 0
Total ... ..	15,807,985	1,755,574	288 23 0	1,84,688 0 0

Patna ... ..	15,063,944	1,730,093	69 2 8	44,200
--------------	------------	-----------	--------	--------

“If the excise revenue in Patna could be raised to the same standard which has been achieved in the worst divisions of these provinces, an increase of Rs. 1,00,000 to the excise revenue would be obtained, and it is probable that this measure could be got without any injury to the opium administration.”

6. That considerable loss accrues to the revenue from the practice of licensed cultivators, whose number always exceeds a million, keeping back a small portion of their produce for domestic consumption or illicit sale, has always been admitted, and is indeed proved by the inadequate excise income obtained in the producing districts. It seems almost certain that this form of smuggling must be more prevalent near great towns, and that some gain would therefore accrue from restricting cultivation in such areas. When circumstances permit the Agent to select the places in which opium should be grown, there would, therefore, appear to be a reason for excluding urban tracts, and the counterbalancing disadvantages of adopting such a rule, if any exist, are not apparent. On this subject the Board will be requested to make a separate report.

7. The question of altering the form in which engagements are made with cultivators in order to obviate an objection which has been taken to their validity has been considered since the close of the year at a conference of Opium Officers, and orders will soon be passed upon the subject by Government.

8. The thanks of the Lieutenant-Governor are given to the Board and to the Opium Agents for their efficient administration of the department during the year. The death of

Dr. Whitwell, whose valuable services were commended in the Resolution of 1885-86, is recorded with regret. The favourable remarks of the Board and of the Agents as to the conduct of several officers subordinate to them are noticed by Sir Stuart Bayley with pleasure, and will be communicated to the Appointment Department. The work done by Surgeon-Major Weir, Messrs. Tytler, Drake, Luard, and Hobson was of special value.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

Secretary to the Government of Bengal.

## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 31st March 1888.

No.	District and date of return	Rainfall at Sadler Station in inches.	Character of the weather and state and prospects of the crops
<b>BENGAL.</b>			
<i>Western Districts.</i>			
<b>BHARWÂN DIVN.</b>	1 Burdwan Mar. 31, '88	Nil	Weather—seasonable. Prospects of all crops good. Sugarcane harvest excellent. Common rice stands at 22 seers per rupee on an average.
	2 Bankura „ 31, '88	0.04	Weather—hot and occasionally cloudy. Pressing of sugarcane is finished. Wheat and barley are being reaped and mustard threshed. Transplanting of boro paddy going on. No change in the rice market.
	3 Boerhoom „ 31, '88	Nil	Cool nights. Weather seasonable. <i>Rabbi</i> harvest almost over; outturn good. Sugarcane excellent.
	4 Midnapur „ 31, '88	Nil	Weather—slightly cooler. Boro paddy in ear and doing well.
	5 Hooghly „ 31, '88	Nil	Weather—normal. State and prospects of crops good so far.
	6 Howrah Apl. 2, '88	Nil	Strong southerly breeze. All prospects good.
<i>Central Districts.</i>			
<b>PRESDUNY DIVN.</b>	6 24-Pargha. Apl. 3, '88	Nil	Weather—hot and bright. Mornings and evenings cool. No crops on the ground except sugarcane, which promises well. Ploughing progresses. Prices stationary.
	7 Nuddea Mar. 31, '88	Nil	Weather—hot and fair. Tillage for <i>aus</i> and indigo in progress.
	8 Koochta „ „	0.13	
	9 Khoolna „ 31, '88	Nil	Weather—warm and clear, mostly with southerly breeze. Boro rice promises well. Ploughing going on.
	10 Jessore „ 31, '88	Nil	Weather—cooler than last week. Tillage for early rice in progress. Prospects of standing crops good.
<b>RAJSHY DIVN.</b>	11 Moorshedabad „ 31, '88	Nil	Weather—getting warmer. <i>Rabbi</i> crops are still being harvested.
	12 Dinagepur Mar. 31, '88	Nil	Weather—moderately hot. Lands are being ploughed for <i>bhadoi</i> crops.
	13 Rajshahy „ 31, '88	Nil	Days hot, nights fairly cool. Rain with hail in Newgong has benefited land under preparation, but has somewhat injured <i>til</i> and jute plants. Rain wanted elsewhere. Cutting of spring crops continues; outturn generally good.
	14 Newgong „ „	0.48	
	15 Rangpur „ 31, '88	Nil	Weather—warm and cloudy. <i>Aus</i> up and doing well. Jute is being sown.
	16 Gaibanda „ „	0.11	Tobacco and wheat are being gathered with good outturn.
	17 Bogra „ 31, '88	0.12	Weather—extremely hot up to 27th, since which slight rain has somewhat cooled the atmosphere. Prospects good. Ploughing for <i>aus</i> and jute going on.
	18 Sherpur „ „	0.42	
	19 Nowkhilla „ „	0.20	
	20 Pubna „ 31, '88	0.07	Strong south-westerly winds. A destructive storm at Mothura on afternoon of 27th. Prospects of crops favourable.
<b>CHITTAGONG DIVN.</b>	21 Serajgonj „ „	0.17	
	22 Darjeeling „ 31, '88	0.06	Weather—cloudy; fairly warm; very little rain. Ploughing for <i>bhadoi</i> rice and jute continues. In the hills Indian-corn and potatoes are progressing favourably, but more rain is wanted elsewhere. Tea-plucking has begun.
	23 Jalpigore „ 31, '88	Nil	Weather—unsettled; east wind. Sowing of <i>bhadoi</i> has commenced in places. Prospects of crops good. Tobacco is said to have been injured by hail-storms.
<i>Eastern Districts.</i>			
<b>DAKKA DIVISION.</b>	24 Dacca Mar. 31, '88	0.25	Weather—hot. <i>Rabbi</i> crops are being gathered. Ploughing for <i>aus</i> paddy and jute continues, and sowing is being pushed on. Boro paddy doing well.
	25 Munshigunge „ „	0.6	
	26 Naraingonj „ „	0.13	Prospects of crops continue favourable.
	27 Farroedpur „ 31, '88	Nil	Weather—hot; night rain here and there. Ploughing continues. Cold-weather crops are being harvested.
	28 Madaripur „ „	0.40	
<b>CHITTAGONG DIVN.</b>	29 Backergunge „ 20, '88	Nil	Weather—seasonable. Prospects of crops continue good.
	30 Mymensingh „ 30, '88	Nil	Weather—sultry. Prospects of crops good.
	31 Netrokona „ „	0.17	
<b>CHITTAGONG DIVN.</b>	32 Chittagong Apl. 3, '88	Nil	Weather—seasonable. Prospects of standing crops fair. Prices stationary.
	33 Nankholy Mar. 30, '88	Nil	Weather—seasonable. <i>Rabbi</i> crops are being harvested. Betel and coconuts flowering. Cultivation of <i>aus</i> progressing and sowing begun in low lands.
	34 Tipperah „ 29, '88	Nil	Weather—seasonable; rather cloudy. State and prospects of crops good. There was rain last week, but a little more would not come amiss. However, there is no room for complaint.
	35 Chittagong Hill Tracts „ 27, '88	Nil	Weather—excessively hot; cloudy on the 25th. Jam cutting nearly finished. Tobacco and chillies doing well.
	36 Hill Tipperah „ 23, '88	Nil	Weather—windy and occasionally cloudy. Prospects of standing crops continue to be fair.



No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BEHAR.</b>			
PATNA DIV.	26 Patna Mar. 31, '88	Nil	Weather—getting hot gradually. <i>Rabbi</i> crops are being reaped. Threshing has commenced. A good prospect of mango crop. Prices of food-grains almost stationary.
	27 Gya „ 31, '88	Nil	Weather—seasonable. Threshing of <i>rabbi</i> commenced. Extraction of opium finished. Sugarcane being irrigated.
	28 Shahabad „ 31, '88	Nil	Weather—dry and hot. Threshing of <i>rabbi</i> crops in progress. Opium collection almost over with excellent outturn.
	29 Darbhanga „ 31, '88	Nil	Weather—cold mornings and hot days. Harvesting of <i>rabbi</i> crops not yet over. Sowing of moong and early rice in progress. Collection of opium completed. Price of common rice averages 20 seers per rupee.
	30 Mozufferpur „ 31, '88	Nil	Weather—seasonable; warm. <i>Rabbi</i> harvest nearly completed; threshing commenced. Opium weighing will shortly commence.
	31 Saran „ 31, '88	Nil	Weather—seasonable. <i>Rabbi</i> is being harvested. Gathering of opium over. Prospects of all standing crops good.
	32 Chumpana „ 31, '88	Nil	Weather—mornings foggy, days hot with variable winds. <i>Rabbi</i> harvesting still going on; average yield estimated. Extraction of opium finished; weighing commences from the 5th proximo. <i>Cheena</i> is coming on well.
BRACHMANS DIV.	33 Monghyr Mar. 31, '88	Nil	Weather—hot and dry. Harvesting of <i>rabbi</i> crops still going on; outturn fair. Mango crop promises well.
	34 Bhagulpur „ 31, '88	Nil	Weather—seasonable. <i>Rabbi</i> harvest yielding about 8-anna outturn. <i>Mohua</i> crop also poor. Rain wanted.
	35 Purneah „ 31, '88	Nil	Weather—seasonable. Wheat below the average. <i>Bhadai</i> and jute cultivation beginning.
	36 Malda „ 31, '88	A few drops.	Weather—days warm, but nights still fairly cool. Winds slight and variable. Harvesting of <i>rabbi</i> crops still going on; outturn generally good except in the north, where some damage has been done to want of rain. Most of the <i>boro</i> paddy has been transplanted, and the sowing of <i>bhadai</i> paddy is going on. Rain is much wanted for these crops. Common rice is selling at an average of 23½ seers per rupee.
	37 Sonthal Pergas. „ 31, '88	Nil	Weather—dry with west winds. Sugarcane harvest going on. Rain wanted for indigo. <i>Mohua</i> crop is being gathered.
<b>ORISSA.</b>			
ORISSA DIV.	38 Cuttack Mar. 30, '88	Nil	Weather—fair. <i>Dalua</i> paddy is flowering and partly ripening. Price of rice stationary.
	39 Pooree „ 29, '88	0.06	Weather—seasonable. Land is being ploughed for the next <i>sarad</i> crop. <i>Dalua</i> crop is being harvested. Common rice 24 seers 7 chittaks per rupee in the Sukder sub-division and 23 seers in the Khorda sub-division.
	40 Balasore „ 30, '88	Nil	Weather—getting gradually warmer. Land is being tilled for rice. <i>Til</i> and other crops promise well. Sugarcane is being planted.
<b>CHOTA NAGPORE.</b>			
<i>South-West Frontier Agency.</i>			
CHOTA NAGPORE DIV.	41 Hazaribagh, Mar. 30, '88	Nil	Weather—seasonable; warm. Sugarcane is being planted and doing well. Prospects of <i>mohua</i> and mango good so far. Gathering of opium completed. Condition of agricultural stock fair.
	42 Lohardugga „ 31, '88	Nil	Weather—hot. Harvesting of <i>rabbi</i> continues. Prices steady.
	43 Singbhoom „ 30, '88	Nil	Weather—cool and misty in the mornings, but very warm during the daytime. <i>Rabbi</i> harvest continues; a 12-anna outturn expected. Mango and <i>mohua</i> so far satisfactory. Cattle-disease on the increase.
	44 Manbhoom „ 31, '88	Nil	Weather—getting hotter every day. Spring crops doing fairly well. Good outturn of <i>mohua</i> expected except in Govindpur, where the flowers have been injured by rain and wind.

Published for general information.

CALCUTTA, REVENUE DEPT.;  
The 3rd April 1888.P. NOLAN,  
Secy. to the Govt. of Bengal.

## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.			STATION OBSERVATIONS.													
			AIR PRESSURE.			WIND.		TEMPERATURE.								
			Representative station.	Mean barometric height, in mm.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature.	Variation from mean of week.
CHITTAGONG.	Pooree	Pooree	29.888	29.910	—	NW	33.0	90.3	25th Mar.	78.1	25th & 30th Mar.	84.4	78.7	81.5	—	81.2
	Opelpore	Opelpore	29.845	29.868	—0.017	SSW	33.0	89.2	24th "	71.8	30th "	85.7	78.0	81.8	+3.1	83.5
	Falar Point	Falar Point	29.890	29.901	—0.010	SSW	33.0	90.0	24th "	75.8	24th, 25th & 26th Mar.	85.6	76.8	81.7	+0.7	85.3
	Outtack	Outtack	29.866	29.887	—0.021	SSW	33.0	101.3	24th "	75.3	25th "	100.8	75.5	88.0	+1.0	88.7
	Balaoro	Balaoro	29.837	29.856	—0.019	SW	17.7	90.6	24th & 25th Mar.	67.9	25th "	91.4	72.7	84.0	+3.0	87.6
SOUTH-WEST MIDNAPORE.	South-West Midnapore	Saugor Island	29.869	29.895	—0.026	S	42.0	91.7	25th "	73.5	25th "	88.6	78.4	84.0	+1.2	84.4
	South 24-Pargannas	Midnapore	29.744	29.764	+0.020	S	102.0	107.3	25th "	71.2	25th & 30th Mar.	101.6	73.3	87.5	+3.8	89.0
	24-Pargannas	Calcutta	29.832	29.874	—0.042	SSW	117.9	98.0	25th "	72.7	25th "	93.8	75.1	84.3	+1.0	—
	Howrah	Howrah	29.765	29.805	—0.040	Variable	10.4	104.7	25th "	69.1	25th "	99.0	73.0	86.7	+2.7	87.9
	Bankura	Bankura	29.746	—	—	NW & Calm	65.0	106.3	25th "	69.0	25th "	101.7	73.6	87.7	—	89.9
WEST MIDNAPORE.	Barbigha	Kanaiyapore	29.833	29.838	—0.005	Westerly	104.2	103.8	25th "	69.7	25th "	101.8	74.2	88.0	+4.4	90.5
	West Midnapore	Barhampore	29.793	29.780	—0.013	SW	99.0	102.7	25th "	69.3	25th "	98.1	71.0	85.1	+1.0	85.8
	Nadda	Krishnanagar	29.750	29.758	—	SSW	128.8	103.2	25th "	69.5	25th "	98.0	74.1	86.1	—	88.5
	Jessore	Jessore	29.851	29.854	—0.003	S	91.8	103.3	25th "	74.4	30th "	96.3	76.0	86.2	+2.8	88.9
	Khoolna	Jessore	29.851	29.854	—0.003	S	91.8	103.3	25th "	74.4	30th "	96.3	76.0	86.2	+2.8	88.9
CHITTAGONG HILL TRACTS.	Chittagong	Chittagong	29.852	29.842	—0.010	Southerly	180.0	81.1	27th & 28th Mar.	78.3	28th & 30th Mar.	86.2	75.1	80.7	+1.7	81.9
	Chittagong Hill Tracts	Dunagiri	29.803	29.805	+0.002	S	157.4	91.8	29th "	74.8	30th "	99.2	76.7	85.9	+4.3	87.8
	Barbigha	Barbigha	29.803	29.805	+0.002	S	157.4	91.8	29th "	74.8	30th "	99.2	76.7	85.9	+4.3	87.8
	Noakhali	Noakhali	29.803	29.805	+0.002	SSW	200.0	67.7	24th "	78.4	25th "	88.6	76.7	81.3	+4.1	83.2
	Farrakka	Farrakka	29.809	29.809	+0.000	Southerly	102.0	84.0	24th "	71.7	25th "	88.6	74.1	81.4	+2.3	86.4
DARJILING HILL TRACTS.	Dacca	Dacca	29.828	29.848	—0.020	SW	118.0	91.1	25th "	74.1	25th "	91.0	76.7	85.4	+1.7	84.3
	Comilla	Comilla	29.871	29.897	—0.026	S	141.1	91.3	25th "	72.8	25th "	80.1	74.7	81.0	+3.1	84.1
	Mymensingh	Mymensingh	29.811	29.870	—0.059	SE	159.4	91.3	27th "	68.2	25th "	94.0	73.2	81.7	+0.3	85.8
	Bogra	Bogra	29.788	29.829	—0.041	SE & W	120.7	101.9	25th "	69.8	25th & 26th Mar.	96.6	72.4	84.5	—	86.4
	Fatma	Sherajunga	29.816	29.863	—0.047	S	125.0	91.9	25th "	69.0	25th "	92.9	71.6	82.3	+3.0	84.2
NORTH BANGALORE.	Najabad	Kamranga Bazar	29.780	29.830	—0.050	SW	160.2	99.4	25th "	62.7	25th "	81.7	68.7	81.7	+0.8	86.4
	Maldah	Maldah	29.780	—	—	NW	16.0	93.7	27th "	60.7	25th "	97.6	65.7	81.5	—	86.9
	Dinapore	Dinapore	29.731	29.840	—0.109	SSW	134.0	93.0	25th & 26th Mar.	65.2	25th "	85.3	67.1	81.3	+2.9	83.7
	Rangpur	Rangpur	29.721	29.840	—0.119	SE	119.0	96.6	25th "	64.3	25th "	83.4	68.0	80.0	+3.3	87.4
	Jalpaiguri	Jalpaiguri	29.872	29.883	—0.011	E	119.7	95.0	25th "	61.0	25th & 27th Mar.	86.3	65.7	75.3	+1.3	78.1
NORTH BANGALORE.	Cooch Behar	Cooch Behar	29.872	29.883	—0.011	E	119.7	95.0	25th "	61.0	25th & 27th Mar.	86.3	65.7	75.3	+1.3	78.1
	Darjeeling Hill Tracts	Darjeeling	29.850	—	—	Calm & W	227.0	64.1	25th "	64.0	25th "	90.5	43.2	54.9	+4.9	60.7
	Purneah	Purneah	29.724	29.851	—0.127	NW	39.3	97.3	27th & 28th Mar.	69.1	27th "	94.2	64.1	79.0	—	86.1
	North Bhagalpore	North Bhagalpore	29.724	29.851	—0.127	NW	39.3	97.3	27th & 28th Mar.	69.1	27th "	94.2	64.1	79.0	—	86.1
	Mozaffarpore	Mozaffarpore	29.724	29.851	—0.127	NW	39.3	97.3	27th & 28th Mar.	69.1	27th "	94.2	64.1	79.0	—	86.1
NORTH BANGALORE.	Darbhanga	Darbhanga	29.879	29.848	—0.031	WSW	157.0	95.2	25th "	65.4	25th "	107.2	68.7	80.4	+2.7	87.2
	Champaran	Motihari	29.895	29.893	—0.002	WSW	232.1	99.0	25th "	65.6	25th "	95.3	61.9	78.1	+4.2	86.0
	Baran	Chupra	29.842	29.856	—0.014	W	165.7	93.8	27th & 28th Mar.	63.4	27th "	89.6	67.1	78.4	—	86.0
	Shahabad	Mohra	29.804	29.864	—0.060	W	21.4	101.0	25th "	60.4	25th "	96.3	73.8	85.1	+4.3	81.0
	Shahabad	Buxar	29.819	29.860	—0.041	WSW	176.1	90.4	25th & 27th Mar.	65.4	25th "	90.2	69.7	82.3	+1.3	86.0
NORTH BANGALORE.	Gya	Arrah	29.866	29.844	—0.022	W & SW	138.9	101.4	25th "	63.6	25th "	97.8	67.0	82.3	+4.3	86.0
	Gya	Gya	29.801	29.836	—0.035	W	148.7	103.0	25th "	63.1	25th "	90.3	66.3	81.3	+0.1	86.0
	Patna	Bankipore	29.845	29.846	—0.001	WNW	113.7	104.3	25th "	64.7	25th "	97.4	69.0	83.2	+1.2	86.0
	South Bhagalpore	Bhagalpore	29.845	29.846	—0.001	WNW	113.7	104.3	25th "	64.7	25th "	97.4	69.0	83.2	+1.2	86.0
	Monghyr	Bhagalpore	29.845	29.846	—0.001	WNW	113.7	104.3	25th "	64.7	25th "	97.4	69.0	83.2	+1.2	86.0
SOUTH BANGALORE.	South 24-Pargannas	Dumka	29.833	—	—	WNW	94.7	108.7	25th "	63.4	25th "	99.1	71.9	82.4	+4.4	86.0
	Hazratnagar	Hazratnagar	29.862	29.863	+0.001	NW	99.8	97.5	27th "	63.3	25th "	99.0	68.3	81.9	+4.9	86.0
	Laharpur	Ranchi	29.757	29.860	+0.103	NW	178.9	77.3	25th & 27th Mar.	61.1	25th "	90.3	69.2	81.4	+0.7	86.0
	Manikpur	Chyabasa	29.843	—	—	Calm	45.7	106.0	25th "	63.1	25th "	94.4	71.0	82.3	+4.3	86.0
	Singhpur	Chyabasa	29.843	—	—	Calm	45.7	106.0	25th "	63.1	25th "	94.4	71.0	82.3	+4.3	86.0

Explanation.—Barometer.—The normal means of air pressure and temperature are the arithmetical average or mean of the readings during three consecutive years. The humidity of the atmosphere is expressed as percentage, saturated air being represented by 100. A quantity is denoted by a dash in the numerical value, or average of the rainfall in that district determined from the report sent in by the sub-divisional officers for the period in question. The rainfall in the district is divided by the number of stations.

for the week ending Friday, the 30th of March 1888.

DISTRICT OBSERVATIONS.														Representative station.	DISTRICT.	METEOROLOGICAL DIVISION.
No.	Average humidity at 10 A.M.	Average cloud amount at 10 A.M. for week.	Rainfall of week at observing station.	OF WEEK.		RAINFALL.						Average number of rainy days.	Normal number of rainy days.			
				Mean for district.	Normal mean.	Since 1st of month.			Since 15th May 1887.							
						Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.					
80	8.3	0.01	0.02	0.02	0.05	0.83	-0.79	46.52	58.18	-11.66	0.2	0.7	Poorva	Poorva	ORISSA.	
78	0.4	NH	—	—	—	—	—	—	—	—	—	—	—	Gopalpara	Poorva	ORISSA.
76	8.4	NH	—	—	—	—	—	—	—	—	—	—	—	False Point	Poorva	ORISSA.
66	1.7	NH	NH	0.26	0.09	1.17	-0.84	48.23	54.08	-6.85	0.0	0.0	Cuttack	Cuttack	ORISSA.	
54	0.4	NH	0.09	0.14	0.71	1.31	-0.90	48.33	60.37	-12.03	0.2	0.0	Balasore	Balasore	ORISSA.	
70	4.9	NH	NH	0.23	0.03	1.36	-1.04	62.92	66.36	-2.43	0.0	0.0	Rangor Island	South-West Midnapore	ORISSA.	
46	1.8	NH	NH	0.24	0.70	1.07	-1.27	53.68	54.17	-0.49	0.0	0.0	Midnapore	Midnapore	ORISSA.	
38	3.1	NH	NH	0.31	1.07	1.53	-0.46	44.38	55.07	-10.78	0.0	1.1	Calcutta	Howrah	SOUTH-WEST BENGAL.	
61	8.0	NH	NH	0.41	0.73	1.47	-0.74	47.98	40.22	-7.75	0.0	1.2	Burdwan	Burdwan	SOUTH-WEST BENGAL.	
52	0.4	0.03	0.01	0.11	0.13	1.26	-1.13	51.58	54.27	-2.79	0.2	1.0	Bankura	Bankura	SOUTH-WEST BENGAL.	
20	1.3	NH	NH	0.24	0.35	0.95	-0.20	40.09	54.10	-14.01	0.0	0.7	Ranagunge	Boorhanpur	SOUTH-WEST BENGAL.	
11	1.0	NH	0.07	0.13	0.45	0.63	-0.45	60.64	51.14	-9.50	0.3	0.9	Behrampur	West Burdwan	SOUTH-WEST BENGAL.	
42	8.7	NH	0.03	0.77	2.14	1.71	+0.48	46.59	52.23	-5.64	0.2	1.3	Krishnagar	Hooghly	SOUTH-WEST BENGAL.	
60	4.4	NH	0.05	0.35	1.80	1.30	-0.31	45.31	47.22	-11.91	0.1	1.4	Jessore	Jessore	SOUTH-WEST BENGAL.	
71	8.7	NH	NH	0.50	1.37	1.84	-0.47	102.44	117.23	-14.78	0.0	1.3	Chittagong	Chittagong	EAST BENGAL.	
30	4.9	NH	NH	1.06	1.81	2.86	-1.05	63.86	60.03	-3.83	0.0	1.5	Dumtiki	Chittagong Hill Tracts	EAST BENGAL.	
71	7.0	NH	NH	1.39	3.71	3.72	+0.02	78.63	114.67	-36.03	0.0	1.3	Noakhali	Noakhali	EAST BENGAL.	
70	2.3	0.12	0.10	0.86	4.90	2.53	+1.42	41.73	60.20	-18.47	0.7	1.4	Furruckpore	Furruckpore	EAST BENGAL.	
73	5.5	0.24	0.41	1.46	4.97	2.93	+2.04	47.58	68.21	-17.63	0.5	1.7	Dacca	Dacca	EAST BENGAL.	
72	8.3	NH	NH	1.30	6.70	3.21	+1.82	60.18	70.39	-10.21	0.0	1.6	Comilla	Comilla	EAST BENGAL.	
62	6.3	NH	0.17	0.93	2.85	2.10	+0.26	63.14	70.76	-7.61	0.0	1.4	Mymensingh	Mymensingh	EAST BENGAL.	
54	0.0	NH	0.16	0.40	0.59	1.14	-0.55	51.65	59.15	-7.50	0.6	1.0	Bogra	Bogra	EAST BENGAL.	
61	2.1	0.11	0.13	0.50	1.88	1.44	+0.42	47.80	56.37	-8.57	1.0	1.2	Sonagunge	Pulna	EAST BENGAL.	
44	0.6	0.02	NH	0.39	1.26	0.84	+0.80	51.03	58.95	-3.90	0.0	0.9	Rampur Mahal	Rajshahi	EAST BENGAL.	
31	0.0	NH	0.28	0.17	0.93	0.93	-0.46	47.02	50.11	-3.09	0.0	0.7	Maldah	Maldah	EAST BENGAL.	
23	0.0	NH	0.15	0.34	0.69	0.93	+0.03	50.06	57.30	+7.28	0.4	0.8	Dinapore	Dinapore	EAST BENGAL.	
21	0.0	0.01	0.55	2.41	1.30	1.30	+1.01	33.40	76.20	+42.80	0.3	1.0	Rangpur	Rangpur	EAST BENGAL.	
74	3.0	NH	NH	1.08	2.34	1.84	+0.50	120.37	112.79	+7.58	0.0	1.5	Jalpaiguri	Jalpaiguri	EAST BENGAL.	
36	0.4	0.13	0.10	1.18	2.02	1.01	+1.01	121.76	123.70	-2.01	0.5	2.2	Darjeeling	Darjeeling Hill Tracts	EAST BENGAL.	
44	0.0	NH	NH	0.10	1.07	0.44	+0.53	66.33	69.63	+3.30	0.0	0.4	Purneah	Purneah	EAST BENGAL.	
34	0.0	NH	0.11	0.32	0.48	0.48	-0.26	47.67	44.23	-3.44	0.0	0.3	Mozufferpore	Mozufferpore	EAST BENGAL.	
24	0.0	NH	0.04	0.38	0.27	0.27	+0.38	50.95	48.08	-2.87	0.0	0.3	Durbhanga	Durbhanga	EAST BENGAL.	
23	0.1	NH	0.06	0.16	0.37	0.37	-0.23	49.07	47.33	-1.74	0.0	0.3	Holihari	Chattogram	EAST BENGAL.	
68	0.0	NH	0.07	0.12	0.17	0.17	-0.15	40.37	43.83	-3.46	0.0	0.4	Chupra	Saran	EAST BENGAL.	
11	0.4	NH	—	—	—	—	—	—	—	—	—	—	—	Dehra	—	EAST BENGAL.
22	1.3	0.02	0.03	0.04	0.37	0.37	-0.33	30.67	41.13	-10.46	0.2	0.9	Bazar	Shahabad	EAST BENGAL.	
21	0.0	NH	—	—	—	—	—	—	—	—	—	—	—	Arrah	—	EAST BENGAL.
36	1.7	NH	0.18	0.04	0.40	0.40	-0.56	30.34	42.58	-12.24	0.0	0.3	Gya	Gya	EAST BENGAL.	
30	1.0	NH	0.07	NH	0.31	0.31	-0.31	38.31	42.23	-3.92	0.0	0.4	Bankipore	Patna	EAST BENGAL.	
48	1.3	NH	0.09	NH	0.35	0.35	-0.33	45.00	44.11	-0.89	0.0	0.3	Bhagulpore	South Bhagulpore	EAST BENGAL.	
48	1.3	NH	0.13	0.35	0.04	0.04	-0.53	68.41	51.03	-17.38	0.0	0.4	Dumka	South Pargannas	EAST BENGAL.	
34	0.7	NH	0.07	0.03	0.03	0.03	-0.02	47.34	52.11	-4.77	0.0	0.3	Hasaribagh	Hasaribagh	EAST BENGAL.	
30	0.7	NH	0.18	0.18	0.03	0.03	-0.07	40.45	49.17	-8.72	0.0	0.4	Ranchi	Lohardugga	EAST BENGAL.	
27	0.7	NH	0.18	0.18	0.03	0.03	-0.07	40.45	49.17	-8.72	0.0	0.4	Chyabham	Manbhum	EAST BENGAL.	

The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.  
 The normal means are the average of the whole day being observed by 10. Under the head District observations of rainfall the normal means are the average of the district and the normal average of the rainfall received in the district, i.e., from total rainfall at the sub-divisional stations.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 30th of March 1898

Meteorological division.	District.	Station.	RAINFALL.						TOTAL.		Total rain- fall since 1st of month.	Average total rain- fall from 1st of month.	Total rain- fall since 1st May 1887.	Average rainfall from 1st May to date.
			Saturday, 28th March.	Sunday, March.	Monday, 29th March.	Tuesday, 30th March.	Wednesday, 31st March.	Thursday, 1st April.	Friday, 2nd April.	Number of rainy days.				
Coastal	Pooree	Pooree	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Khurda	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Bampur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Pale Point	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Op	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Cuttack	Pipli	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Jagatsinghpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Banki	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Cuttack	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Kemrajpara	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Balasore	Jajpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Dharmasalla	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Saltpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chandbali	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Bhadrach	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
South-West Musual.	Midnapore	Borah	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Balasore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Jelaisore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Baripodah	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Contai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	24-Pargunnah	Sanger Island	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Tumlook	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Midnapore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chhatrai	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Kukrahaty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Howrah	Urisa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Bhagwanpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Garbeta	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Diamond Har- bour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Canning Town	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
SOUTH-WEST MUSUAL.	Burdwan	Alipore Jail	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Barrackpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Dum-Dum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Haramet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Busserhat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Bankura	Howrah	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Moharaka (Colabariah)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Serampore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Houghly	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Jehanabad	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Burdwan	Culna	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Burdwan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Culwa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Ramganjunge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Monkur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
Bankura	Bankura	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Buxaripore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Mahara	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Khutra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Indra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
SOUTH-WEST MUSUAL.	Burdwan	Kotalpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Anda	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Gauzajalhati	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Raspara	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Sandamahi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Burdwan	Bh. Anny	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Hafampore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Ramooe Haul	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Salpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Nuddea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Burdwan	Ranaghat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Kudmaghat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chumalanga	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Mel-pore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Kushita	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
Burdwan	Kalkhira	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Bagirhat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Khoolna	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Jessore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
	Narail	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45	
SOUTH-WEST MUSUAL.	Burdwan	Jessore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Jhenidah	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Mugourah	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Bongung	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Moorehabad	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Burdwan	Randi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Borhampore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Lalbagh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Azimnagar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Jungpore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Burdwan	Lalgola	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Atkripore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Katibadi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
SOUTH-WEST MUSUAL.	Chittagong	Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Chittagong	Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
	Chittagong	Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.33	53.45
		Chittagong	0.00	0.00	0.00	0.00	0.00	0.00						



[illegible]

**Explanation.**—Indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA the 3rd April 1888.

# SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 30th MARCH 1888.

At the commencement of the week pressure was very low and considerably below the average of the period in Bengal. Strong westerly winds were blowing across Behar into West Bengal, and unusually strong winds across the Bengal coast into Orissa, South and East Bengal. Pressure began to increase on the 25th, on which day the dry hot winds blowing across Behar gave very high temperatures in West Bengal. Pressure steadily increased until the 29th, when it was from one-sixth to a quarter of an inch higher than on the 24th. With the rise of the barometer the winds in Behar decreased in strength, and the day temperatures in Western Bengal as well as in South Behar decreased several degrees. On the 27th and 28th a few local thunder-showers occurred at several stations in East and North Bengal. The amounts of rain registered were very small, and the slight disturbance which gave rise to these thunder-storms apparently passed away on the evening of the 28th. At this time an unusually rapid rise of the barometer was in progress in Upper India. This caused on the 28th a very considerable and rapid extension of the westerly winds across Behar into Central and North Bengal as far east as Jessore, Rampore Beaulah, Bogra, Serajgunj and Dinagepore. These dry winds gave unusually low humidities to Central Bengal on the 28th and morning of the 29th, after which they retreated, and were replaced by the usual damp southerly winds of the season. The barometer began to fall on the 30th, on which day (the last of the week) fine settled weather with clear skies prevailed over the whole province.

**Pressure.**—As stated above, the barometer rose steadily and continuously from the 23rd to the 29th, when the return downward movement commenced. The rise varied from  $\cdot 15''$  to  $\cdot 25''$  in amount, and was greatest in North Bengal and Behar. Pressure was so low at the commencement of the week that, notwithstanding the large rise, the mean pressure for the week was below the average over the greater part of the province. The deficiency for the week was  $\cdot 025''$  in amount in South-West Bengal,  $\cdot 02''$  in North Bengal and Behar, and  $\cdot 01''$  in Orissa.

The mean pressure of the week was almost identical with the average of the period in East Bengal and Chutia Nagpur.

**Temperature.**—The conditions at the beginning of the week gave very high day temperatures to Behar, South-West and Central Bengal, and Chutia Nagpur. This culminated on the 25th, when the highest temperatures of the week and month were observed. The following are amongst the most remarkable :—

				Maximum temperature during week.
Midnapore	...	...	...	107.3° on the 25th.
Bankoora	...	...	...	106.1° ditto.
Raneegunge	...	...	...	105.8° ditto.
Chyebassa	...	...	...	104.8° ditto.
Burdwan	...	...	...	104.7° ditto.
Gya	...	...	...	103.0° ditto.
Jessore	...	...	...	103.3° ditto.

The temperature fell considerably on the 26th and varied from day to day during the remainder of the week within moderate limits.

The mean temperature of the week was above the average for all divisions except North Behar. The excess averaged  $3.2^{\circ}$  for East Bengal,  $2.6^{\circ}$  for South-West Bengal,  $2^{\circ}$  for Chutia Nagpur, and  $1.7^{\circ}$  for South Behar and Orissa.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 30th March 1888.

	Normal mean maximum temperature for the week ending 30th March.	Actual mean maximum temperature for the week ending 30th March 1888.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 30th March.	Actual mean minimum temperature for the week ending 30th March 1888.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 30th March.	Actual mean daily temperature for the week ending 30th March 1888.	Variation of actual mean from the normal.
Cuttack	88.8	100.8	+2.0	75.2	76.5	+0.3	87.0	88.1	+1.1
Calcutta	92.6	93.8	+1.2	78.0	78.1	+0.5	82.6	84.6	+1.9
Dacca	91.7	91.0	-0.7	71.0	75.7	+4.1	81.7	83.4	+1.7
Burdwan	90.1	89.9	+3.8	71.0	78.8	+1.7	84.6	86.7	+2.7
Patna	90.3	97.4	+1.1	67.0	69.0	+1.4	82.9	89.2	+1.3
Gya	90.3	90.3	+0.8	70.3	69.3	-1.0	84.4	84.3	-0.1
Farrukh	94.3	94.3	-0.1	65.4	64.1	-1.3	79.9	79.2	-0.7
Hamirbagh	93.0	93.0	+2.0	60.9	60.9	+2.0	80.0	81.9	+1.9
Barjeeling	87.7	80.5	+2.8	44.9	40.3	+6.2	50.9	54.9	+4.0

**Humidity.**—The air has been drier than usual in Behar and Chutia Nagpur during the week. The only remarkable feature in this element of observation during the week was the

very large and sudden decrease of humidity in West and Central Bengal on the morning of the 28th, caused by the extension of westerly dry winds into that area. No change occurred in Behar, where the air was on the whole slightly damper than on the 27th. The following examples will illustrate the magnitude of the change:—

	HUMIDITY AT 10 A.M.		Decrease in 24 hours.
	27th March.	28th March.	
Bancoora ... ..	63	20	43
Raniganj ... ..	75	11	64
Berhampore ... ..	74	18	56
Krishnaghur ... ..	70	16	54
Bardwan ... ..	68	14	54
Calcutta ... ..	74	24	50
Jessore ... ..	78	39	39
Bogra ... ..	69	29	40
Sernganj ... ..	72	36	36
Rampore Beaulah ... ..	67	21	46
Maldab ... ..	60	19	41
Dinapore ... ..	42	22	20

The humidity increased with almost equal rapidity in Bengal on the afternoon of the 29th and morning of the 30th.

*Rain.*—A few light local showers of little importance fell on the 23rd in the Darjeeling Hills, and on the 27th and 28th in some districts of East and North Bengal. The amounts registered were in all cases small, and averaged less than a tenth of an inch for these meteorological divisions.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 30th of March 1888:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.				Average mean of week above or below normal mean of week.	Of week.			Rainy days.		Since 1st of month.		Since 10th May 1887.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average.		Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	103°4	67°8	92°9	75°7	84°3	+1°7	0°04	0°32	-0°28	0°1	0°8	-0°7	0°48	1°13	46°80	58°24
South-West Bengal	102°3	66°2	87°8	74°0	80°2	+2°6	0°02	0°55	-0°53	0°1	1°1	-1°0	1°00	1°47	49°87	54°73
East Bengal	100°1	68°2	88°3	74°0	81°9	+3°2	0°11	1°00	-0°88	0°3	1°6	-1°2	3°32	2°75	61°32	70°87
North Bengal	101°3	60°7	83°8	68°1	81°0	+2°4	0°07	0°57	-0°50	0°3	1°2	-0°9	1°00	1°18	75°65	74°93
North Behar	98°0	58°6	81°8	65°2	78°0	-0°6	Nil	0°10	-0°10	0°0	0°3	-0°3	0°30	0°37	58°07	49°38
South Behar	103°0	63°1	88°0	69°0	84°0	+1°8	Nil	0°08	-0°08	0°0	0°3	-0°3	0°08	0°40	62°85	44°80
Chota Nagpur	97°0	61°1	85°2	65°0	81°0	+2°0	Nil	0°10	-0°10	0°0	0°4	-0°4	0°02	0°03	40°58	51°07

\* Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL;

J. ELIOT.

The 3rd April 1888.

for Offg. Meteorological Reporter to the Govt. of Bengal.



Results of the Meteorological Observations taken at the Alipore Observatory from 25th to 31st March 1888.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.	
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.			
1888.		°		Inches	°	°	°	°	°	Inches	°	%	°		Inches		
Mar.	25th	142.9	5.4	29.732	83.0	93.2	16.7	76.5	77.9	0.875	75.2	76	SSW and S	...	156	Nil	Chiefly cloudy, o.
"	26th	145.6	3.0	29.805	83.6	91.2	14.1	77.1	78.4	0.901	76.2	79	SSW, SSE and S	...	119	"	Chiefly cloudy.
"	27th	144.0	8.0	29.791	83.5	90.6	15.1	75.2	78.0	0.857	75.6	73	SSW and S by W	...	167	"	Chiefly cloudy, o.
"	28th	146.6	7.6	29.812	83.4	92.7	18.2	74.5	72.0	0.612	66.0	60	SSW, NNW and calm.	...	63	"	Clear, d.
"	29th	147.5	7.8	29.844	83.3	93.0	18.4	74.6	76.0	0.863	72.6	73	S by W, variable and calm.	...	50	"	Chiefly clear, d.
"	30th	148.3	8.9	29.796	83.5	93.7	19.2	74.5	77.4	0.858	74.6	77	SSW and S	...	129	"	Chiefly clear, d.
"	31st	146.1	9.3	29.748	83.0	91.3	16.9	74.4	77.8	0.882	75.4	79	SSW and S	...	132	"	Chiefly clear.

The mean pressure of the seven days	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, S. G.'s Office	...	...	...	29.730
The total number of hours of bright sunshine	...	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	...	85.7
The mean temperature of the seven days	...	...	...	°
The average temperature of the corresponding period for 24 years, S. G.'s Office	...	...	...	83.5
The extreme variation of temperature	...	...	...	19.3
The maximum temperature	...	...	...	93.7
The highest velocity of the wind in one hour	...	...	...	m.p.h.
The highest pressure of wind on one square foot	...	...	...	lbs.
The mean relative humidity	...	...	...	%
The average relative humidity of the corresponding period for 24 years, S. G.'s Office	...	...	...	76
The total fall of rain from 25th to 31st March 1888	...	...	...	Inches.
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	Nil
The total fall from 1st January to 31st March 1888	...	...	...	0.09
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	4.89
	...	...	...	2.77

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o overcast, d. dew.

JOHN ELIOT,

Offg. Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 2nd April 1888.

**Results of the Thermometrical Observations taken at the Meteorological Office,  
Chowringhee, from 25th to 31st March 1888.**

MONTH.	Date.	TEMPERATURE.				Mean wet bulb.	HYGROMETRY.			Rain.
		Mean.	Maximum.	Range.	Minimum.		Vapour tension.	Dew point.	Humidity.	
1888.		"	"	"	"	"	Inches.	"	%	inches.
March	25th	83.6	95.2	18.6	70.6	78.9	.926	76.9	80	Nil.
"	26th	83.5	98.0	15.8	77.2	79.3	.946	77.5	82	"
"	27th	83.1	94.0	17.7	73.3	78.6	.919	76.7	81	"
"	28th	84.7	95.0	19.3	75.7	68.3	.473	57.4	39	"
"	29th	83.9	95.4	20.4	73.0	71.5	.608	64.5	53	"
"	30th	83.8	96.2	21.1	75.1	76.8	.829	73.5	72	"
"	31st	83.0	94.0	19.2	74.8	77.3	.861	73.7	76	"

The mean temperature of the seven days ... 83.6

The extreme variation of temperature ... 21.4

The maximum temperature ... 96.2

The mean relative humidity ... 69%

The total fall of rain from 25th to 31st March 1888 ... Nil

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

The 2nd April 1888.

JOHN ELIOT,

Offg. Meteorological Reporter to the Govt. of India.

## MEMORANDUM.

THE chief incidents in connection with the vital statistics of the principal Municipalities in Bengal, for the week ending 17th March 1888, are the following :—

1. That during the week in question births and deaths were registered in the proportions, respectively, of 21·3 and 29·7 per 1,000 of population, as opposed to 19 and 26·1 per 1,000, respectively, during the preceding week ending 10th March, indicating a considerable improvement in the registration of both the casualties.

2. That births and deaths were recorded in the highest rates from the following Municipalities :—

<i>Births.</i>			<i>Deaths.</i>		
		Ratio per mille.			Ratio per mille.
Beanlah	...	55·2	Comillah	...	84·7
Kishnaghur	...	45·4	Suburbs of Calcutta	...	61·4
Hughli	...	43·0	Narainganj	...	41·4
Narainganj	...	41·4	Gya	...	32·8
Comillah	...	38·5	Darjiling	...	32·6
Durbhanga	...	37·8	Midnapore	...	32·5
Bhagulpore	...	31·7	Burdwan	...	32·0
Monghyr	...	30·7	Durbhanga	...	30·7
			Hughli	...	29·5

3. That the specific diseases, as noted below, proved fatal at the rates exhibited opposite them :—

						Ratio per mille during the weeks ending—	
						17th March 1888.	10th March 1888.
Cholera	...	...	...	...	...	8·2	5·1
Small-pox	...	...	...	...	...	·1	·1
Fever	...	...	...	...	...	9·9	10·3
Bowel-complaints	...	...	...	...	...	3·4	2·8
Injury	...	...	...	...	...	·2	·2
Other causes	...	...	...	...	...	7·8	7·6

indicating chiefly, that the mortality from cholera was much higher during the week under notice than during the preceding week.

4. That while bowel-complaints proved fatal only in Hughli Municipality at the high rate of 10·7 per 1,000 of population, and the deaths from small-pox and injury were nowhere noticeably large, the other diseases enumerated above caused the highest mortality in the Municipalities mentioned below :—

<i>Cholera.</i>		<i>Fever.</i>		<i>Other causes.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Comillah	53·9	Comillah	26·9	Gya	20·6
Suburbs of Calcutta	29·6	Burdwan	25·9	Midnapore	17·0
Howah	11·4			Monghyr	11·7
Serampore	7·8			Durbhanga	11·0
Hughli	6·7			Suburbs of Calcutta	10·5
Gya	2·7				

5. That the mortality of the week, classified under the heads of *Sex*, *Class* and *Age*, stood as shown below :—

<i>According to Sex.</i>			<i>According to Class.</i>			<i>According to Age.</i>		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Males	...	31·8	Christians	...	21·7	Under 1 year	...	190·4
Females	...	27·3	Hindus	...	28·6	1 and under 5 years	...	38·4
Ratio of male deaths to every 100 female deaths	132		Mahomedans	...	32·8	5 " 10 "	...	16·3
						10 " 15 "	...	13·1
						15 " 20 "	...	19·3
						20 " 30 "	...	26·1
						30 " 40 "	...	21·2
						40 " 50 "	...	23·7
						50 " 60 "	...	32·8
						60 years and upwards	...	60·7

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,

The 2nd April 1888.

Offg. Sanitary Commissioner for Bengal.

*Statement respecting the Results of the Registration of Births and Deaths in the Principal Municipalities in Bengal during the week ending 17th March 1888.*

[illegible]

MORTALITY ACCORDING TO—									
Age.									
Ratio per 1,000 of Population per Annum.									
Deaths among—									
Class.									
Deaths.									
Ratio per 1,000 of Population per Annum.									
Under 1 year.									
1 and under 5 years.									
5 and under 10 years.									
10 and under 15 years.									
15 and under 20 years.									
20 and under 25 years.									
25 and under 30 years.									
30 and under 35 years.									
35 and under 40 years.									
40 and under 45 years.									
45 and under 50 years.									
50 and under 55 years.									
55 and under 60 years.									
60 and under 65 years.									
65 and under 70 years.									
70 and under 75 years.									
75 and under 80 years.									
80 and under 85 years.									
85 and under 90 years.									
90 and under 95 years.									
95 and under 100 years.									
Total.									
Total.									

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,  
The 2nd April 1888

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,  
Offg. Sanitary Commissioner of Bengal.

## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

## SOUTH-WESTERN CIRCLE.

## CALCUTTA AND EASTERN CANALS.

Statement showing Quantities of Goods carried during the month of February 1888.

Number of boats or rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
2,840	1. Grain ...	47,574	.....	47,574	33,36,529	47,574	33,36,529	For detail see next page.
9	2. Cotton ...	135	.....	135	69,500	135	69,500	
13	3. Oilseeds ..	210	.....	210	22,974	210	22,974	
539	4. Salt ...	554	8,739	9,293	10,40,800	9,293	10,40,800	
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
10	6. Metal ...	16	83	99	17,625	99	17,625	
211	7. Building materials	2,102	50	2,152	36,148	2,152	36,148	
2,004	8. Miscellaneous* ...	15,995	2,087	18,082	19,33,922	18,082	19,33,922	
598	9. Fuel ...	11,002	1,921	12,923	1,11,714	12,923	1,11,714	
.....	10. Timber ...	.....	.....	.....	.....	.....	.....	
.....	11. Bamboos ...	.....	.....	.....	.....	.....	.....	
6,224	12. Total ...	77,588	12,880	90,468	65,69,212	90,468	65,69,212	
5,396	13. Total of same month last year.	72,167	11,626	83,793	52,43,552	83,793	52,43,552	

	Up.	Down.	Total.		Rs. A. P.
14. Total number of boats plying cargo ... No.	5,400	824	6,224	Total tollage of month— 24+25+26 ...	59,350 8 9
14a. Ditto empty ..	3,507	1,029	4,529	Total tollage of same month last year ...	50,538 13 3
15. Total number of boats plying passenger No.	340	5	345		
16. Total registered tonnage, cargo Tons.	239,202	36,731	275,933	Memorandum of Tollage.	
17. Total registered tonnage, passenger Tons.	898	32	930		
18. Ton-mileage ...	2,045,690	367,310	24,13,000		Rs. A. P.
19. Estimated value of cargo Rs.	53,18,715	1,250,497	65,69,212	1. Balance not recovered on the 1st of the month	2,507 12 3
20. Number of passengers No.	1,460	26	1,486	2. Tollage per month ...	59,350 8 9
21. Rafts, bamboos c. ft.	...	.....	.....		
22. Do., bullahs ..	.....	.....	.....		
23. Estimated value of rafts Rs.	.....	.....	.....	3. Total ...	61,858 5 0
24. Tollage on boats ..	50,725-13-3	8,624-11-6	59,350-8-9		
25. Compounded tollage on boats Rs.	.....	.....	.....	4. Amount paid into treasury during the month ...	60,208 15 6
26. Tollage on rafts ..	.....	.....	.....		
27. Total tollage on boats per ton-mile Rs.	.....	.....	4-72 pice		
28. Total tollage on rafts per 100 cubic feet Rs.	.....	.....	.....	5. Balance due at the end of the month ...	1,000 0 0

## ARTICLES OF TRAFFIC INCLUDED IN ITEM 8 (MISCELLANEOUS).

## CALCUTTA AND EASTERN CANALS.

Number of sacks or casks.	Description.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Quantity.	Value.	
		Up.	Down.	Total.	Tons.	Rupces.	
462	(a) Jute ...	11,018	.....	11,018	11,018	12,33,956	
66	(b) Jaggery ...	341	268	609	609	85,325	
15	(c) Sugar ...	64	.....	64	64	12,635	
3	(d) Tobacco ...	24	1	25	25	2,760	
571	(e) Fish ...	178	.....	178	178	49,893	
7	(f) Hides ...	11	.....	11	11	2,400	
74	(g) Poultry ...	21	.....	21	21	17,525	
181	(h) Hay and straw ...	1,493	.....	1,493	1,493	31,468	
90	(j) Oils ...	.....	1,021	1,021	1,021	1,42,900	
34	(k) Earthenware ...	53	29	82	82	1,148	
501	(m) Other miscellaneous	2,792	768	3,560	3,560	3,53,912	
2,004	Total Miscellaneous...	15,995	2,087	18,082	18,082	19,33,922	

## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

## SOUTH-WESTERN CIRCLE.

## CALCUTTA AND EASTERN CANALS.

Statement showing Quantities of Goods carried during the month of February 1888.

Number of boats or rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupess.	Tons.	Rupess.	
2,840	1. Grain ...	47,574	.....	47,574	33,36,529	47,574	33,36,529	* For detail see next page.
9	2. Cotton ...	135	.....	135	69,500	135	69,500	
13	3. Oilseeds ..	210	.....	210	22,974	210	22,974	
539	4. Salt ...	551	8,739	9,293	10,40,800	9,293	10,40,800	
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
10	6. Metal ...	16	83	99	17,625	99	17,625	
211	7. Building materials	2,102	50	2,152	36,148	2,152	36,148	
2,004	8. Miscellaneous* ...	15,995	2,087	18,082	19,33,922	18,082	19,33,922	
598	9. Fuel ...	11,002	1,921	12,923	1,11,714	12,923	1,11,714	
.....	10. Timber ...	.....	.....	.....	.....	.....	.....	
.....	11. Bamboos ...	.....	.....	.....	.....	.....	.....	
6,224	12. Total ...	77,588	12,880	90,468	65,69,212	90,468	65,69,212	
5,396	13. Total of same month last year.	72,167	11,626	83,793	52,43,552	83,793	52,43,552	
		Up.	Down.	Total.			Rs. A. P.	
14.	Total number of boats plying cargo ... No.	5,100	824	6,224	Total tollage of month— 24 + 25 + 26 ...		59,350 8 9	
14a.	Ditto empty „	3,507	1,022	4,529	Total tollage of same month last year ...		50,538 13 3	
15.	Total number of boats plying passenger No.	340	5	345				
16.	Total registered tonnage, cargo Tons.	239,302	36,731	275,933	Memorandum of Tollage.			
17.	Total registered tonnage, passenger Tons.	898	32	930				
18.	Ton-mileage ...	2,045,690	367,310	24,13,000				
19.	Estimated value of cargo Rs.	53,18,715	1,250,497	65,69,212	1. Balance not recovered on the 1st of the month		2,507 12 3	
20.	Number of passengers No.	1,460	26	1,486	2. Tollage per month ...		59,350 8 9	
21.	Rafts, bamboos c. ft.	.....	.....	.....	3. Total ...		61,858 5 0	
22.	Do., bullahs „	.....	.....	.....				
23.	Estimated value of rafts Rs.	.....	.....	.....	4. Amount paid into treasury during the month		60,206 15 6	
24.	Tollage on boats „	50,725-13-3	8,624-11-6	59,350-8-9	5. Balance due at the end of the month		1,651 5 6	
25.	Compounded tollage on boats Rs.	.....	.....	.....				
26.	Tollage on rafts „	.....	.....	.....				
27.	Total tollage on boats per ton-mile Rs.	.....	.....	472 pice				
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	.....				



## ARTICLES OF TRAFFIC INCLUDED IN ITEM 8 (MISCELLANEOUS).

## CALCUTTA AND EASTERN CANALS.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupees.	Tons.	
462	(a) Jute ...	11,018	.....	11,018	12,33,956	11,018	12,33,956
66	(b) Jaggery ...	341	268	609	85,325	609	85,325
15	(c) Sugar ...	64	.....	64	12,635	64	12,635
3	(d) Tobacco ...	24	1	25	2,760	25	2,760
571	(e) Fish ...	178	.....	178	49,893	178	49,893
7	(f) Hides ...	11	.....	11	2,400	11	2,400
74	(g) Poultry ...	21	.....	21	17,525	21	17,525
181	(h) Hay and straw ...	1,493	.....	1,493	31,468	1,493	31,468
90	(j) Oils ...	.....	1,021	1,021	1,42,900	1,021	1,42,900
34	(k) Earthenware ...	53	29	82	1,148	82	1,148
501	(m) Other miscellaneous	2,792	768	3,560	3,53,912	3,560	3,53,912
2,004	Total Miscellaneous...	15,995	2,087	18,082	19,33,922	18,082	19,33,922

## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

## SOUTH-WESTERN CIRCLE.

## TOLLY'S NULLAH.

Statement showing Quantities of Goods carried during the month of February 1888.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupess.	Tons.	
5,605	1. Grain ...	19,205	.....	19,205	11,59,382	19,205	11,59,382
9	2. Cotton ...	127	.....	127	71,000	127	71,000
2	3. Oilseeds ...	23	.....	23	3,250	23	3,250
92	4. Salt ...	701	503	1,204	1,31,800	1,204	1,31,800
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
3	6. Metal ...	55	.....	55	7,670	55	7,670
357	7. Building materials	3,176	.....	3,176	15,071	3,176	15,071
1,083	8. Miscellaneous* ...	3,361	170	3,531	3,43,955	3,531	3,43,955
245	9. Fuel ...	3,496	16	3,512	30,178	3,512	30,178
1 raft	10. Timber ...	.....	478 c. ft.	478 c. ft.	1,434	478 c. ft.	1,434
6 rafts	11. Bamboos ...	370 c. ft.	.....	370 "	61	370 "	61
7,396 & 7 rafts.	12. Total ...	30,144 & 370 c. ft.	589 & 478 c. ft.	30,833 & 848 c. ft.	17,66,801	30,833 & 848 c. ft.	17,66,801
7,333 & 2 rafts	13. Total of same month last year.	28,689 & 70 No.	586 & 70 No.	29,275 & 140 No.	14,97,262	29,275 & 140 No.	14,97,262

\* For details see next page.

	Up.	Down.	Total.		Rs. A. P.
14. Total number of boats plying cargo No.	7,303	93	7,396	Total tollage of month— 24 + 25 + 26 ...	17,106 10 6
14a. Ditto empty "	1,192	320	1,512		
15. Total number of boats plying passenger No.	623	66	689	Total tollage of same month last year ...	15,574 0 6
16. Total registered tonnage, cargo Tons.	96,204	3,325	99,529	Memorandum of Tollage.	
17. Total registered tonnage, passenger Tons.	1,541	216	1,757		
18. Ton-milage ...	3,37,997	53,152	9,91,149		Rs. A. P.
19. Estimated value of cargo ...	16,92,076	73,230	17,65,306	1. Balance not recovered on the 1st of the month ...	1,484 0 6
20. Number of passengers ..	5,064	520	5,584	2. Tollage per month ...	17,106 10 6
21. Rafts, bamboos c. ft.	370	.....	370	3. Total ...	18,590 11 6
22. Do., bullahs "	.....	478	478		
23. Estimated value of rafts Rs.	61	1,434	1,495	4. Amount paid into treasury during the month ...	17,906 4 6
24. Tollage on boats "	16,239-12-0	854-8-6	17,094-4-6		
25. Compounded tollage on boats Rs.	.....	.....	.....	5. Balance due at the end of the month ...	684 7
26. Tollage on rafts "	1-8-0	10-14-0	12-6-0		
27. Total tollage on boats per ton-mile Rs.	.....	.....	3-31 pies		
28. Total tollage on rafts per 100 cubic feet Rs.	.....	.....	1-7-4		

## ARTICLES OF TRAFFIC INCLUDED IN ITEM 8 (MISCELLANEOUS).

## TOLLY'S NULLAH.

Number of loads or sacks.	Description.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Paise.	Tons.	Rupess.
2	(a) Jute ...	20	...	20	2,200	20	2,200
88	(b) Jaggery ..	527	4	531	73,010	531	73,010
3	(c) Sugar ...	21	...	21	4,025	21	4,025
8	(d) Tobacco ...	57	7	64	10,500	64	10,500
217	(e) Fish ...	41	1	42	11,843	42	11,843
.....	(f) Hides ...	.....	.....	.....	.....	.....	.....
3	(g) Poultry ...	1	.....	1	168	1	168
358	(h) Hay and straw...	856	.....	856	17,976	856	17,976
40	(i) Oils ...	284	3	284	39,825	284	39,825
114	(k) Earthenware .	108	5	113	1,589	113	1,589
250	(m) Other miscella- neous.	1,419	150	1,609	1,82,519	1,609	1,82,519
1,084	Total Miscellaneous ...	3,361	170	3,531	3,43,955	3,531	3,43,955

**ABSTRACT FOR THE MONTH OF FEBRUARY 1888, AS COMPARED WITH THE  
CORRESPONDING MONTH OF THE PREVIOUS YEAR.**

	TRAFFIC, 1887-88.			TRAFFIC, 1886-87.		
	During the month.		To end of the month.	During the month.		To end of the month.
	Rs.	A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Calcutta and Eastern Canals ...	59,350	8 9	3,81,268 9 6	59,538	13 3	3,18,405 0 0
Tolly's Nullah ...	17,106	10 6	1,25,895 1 6	15,574	0 6	96,090 10 0
<b>Total ...</b>	<b>76,457</b>	<b>3 3</b>	<b>5,07,163 11 0</b>	<b>66,112</b>	<b>13 9</b>	<b>4,14,495 10 0</b>

Calcutta,  
The 3rd April 1888.

A. D. McARTHUR, Major, R.E.

Under-Secretary to the Government of Bengal.

**CIRCULAR AND EASTERN CANALS.**

*Approximate Return of Traffic for the week ending Saturday, the 31st March 1888,  
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 31st MARCH 1888.			WEEK ENDING SATURDAY, THE 2nd APRIL 1887.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	1,194	3,27,060	6,097	598	1,83,140	3,204
Jute ...	26	12,275	147	43	30,005	556
Firewood ...	219	1,05,125	1,587	153	80,800	1,022
Other articles ...	1,029	2,31,130	3,843	743	2,35,885	3,331
<b>Total ...</b>	<b>2,468</b>	<b>6,75,590</b>	<b>11,674</b>	<b>1,537</b>	<b>5,20,830</b>	<b>8,113</b>

## Nalhati State Railway.

Statement showing Increases and Decreases in tonnage of Staples carried over the Nalhati State Railway during the month of January 1888, as compared with the same month of the previous year.

STAPLES.	1887.		1888.		1887.	1888.	Increase.	Decrease.
	Up.	Down.	Up.	Down.	Total.	Total.		
Coal ... ..	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Cotton, raw ... ..	639	...	870	...	639	870	240	...
Cotton piece-goods—	13	...	23	...	14	21	9	...
1.—European ... ..	20	3	50	1	29	51	22	...
Drugs and chemicals—	...	...	...	...	...	...	...	...
2.—Non-intoxicating—	1	...	1	...	1	1	...	...
3.—Others ... ..	...	...	...	...	...	...	...	...
Jute—	...	...	...	...	...	...	...	...
1.—Raw ... ..	...	38	...	...	34	...	...	3
2.—Gunny-bags and cloths ... ..	34	4	30	2	34	41	3	...
Grains—	...	...	...	...	...	...	...	...
1.—Wheat ... ..	1	...	...	...	1	...	...	...
2.—Rice ... ..	81	1,029	4	1,401	1,110	1,495	385	...
3.—Others ... ..	21	38	21	367	69	488	129	...
Hides and skins—	...	...	...	...	...	...	...	...
1.—Hides of cattle—	...	...	...	...	...	...	...	...
a.—Dressed ... ..	...	1	1	...	1	1	...	...
b.—Undressed ... ..	...	...	...	...	...	...	...	...
Leather, manufactured ... ..	4	1	5	6	5	11	6	...
Liquors—	...	...	...	...	...	...	...	...
1.—Beer ... ..	1	...	2	...	1	2	1	...
2.—Wines ... ..	1	...	1	...	1	1	...	...
Metals—	...	...	...	...	...	...	...	...
1.—Copper unwrought ... ..	1	...	...	...	1	...	...	1
2.—Iron ... ..	4	...	8	...	4	8	4	...
3.—Others ... ..	0	2	5	...	11	6	...	6
Oils—	...	...	...	...	...	...	...	...
1.—Castor ... ..	...	...	1	...	...	1	1	...
2.—Kerosine ... ..	2	...	1	...	2	1	...	1
3.—Others ... ..	...	...	2	...	...	2	2	...
Provisions—	...	...	...	...	...	...	...	...
1.—Ghee ... ..	3	...	4	...	3	4	1	...
2.—Dried fruits and nuts ... ..	2	...	3	...	2	3	1	...
3.—Others ... ..	75	...	29	...	73	59	...	46
Railway plant and rolling-stock ... ..	40	4	15	...	40	15	...	31
Rail ... ..	20	...	16	...	20	24	4	...
Oilseeds—	...	...	...	...	...	...	...	...
1.—Linseed ... ..	...	...	...	37	...	37	37	...
2.—Mustard and rape ... ..	10	...	67	...	10	67	57	...
3.—Til or gingelly ... ..	1	...	2	...	1	2	1	...
4.—Others ... ..	2	...	5	...	2	5	3	...
Silk, raw—	...	...	...	...	...	...	...	...
2.—Indian ... ..	...	25	...	15	114	33	...	81
Silk piece-goods—	...	...	...	...	...	...	...	...
2.—Indian ... ..	1	5	...	5	6	5	...	1
Stone and lime ... ..	1	...	1	...	1	1	...	...
Sugar—	...	...	...	...	...	...	...	...
1.—Drained ... ..	5	...	10	...	5	10	14	...
2.—Undrained ... ..	53	...	15	...	33	13	...	19
Tobacco ... ..	...	...	6	...	...	6	6	...
Paper and pasteboard ... ..	4	...	2	...	4	2	...	2
Umbrellas ... ..	1	...	...	...	1	...	...	1
All other articles of merchandise ... ..	54	7	53	...	41	53	13	...
Total ... ..	1,161	1,159	1,296	1,727	2,310	3,022	839	227

## INCREASE.

Tons.

Coal ... ..	240
This increase is due to less import during the previous month.	
Cotton, raw ... ..	9
This increase is due to greater demand.	
Cotton piece-goods—(1) European ... ..	22
There being no sufficient water in the River Bhagiratty, the steamer service between Calcutta and Jeagunj is stopped, and the merchants are bringing their goods by rail; hence the increase.	
Grains—(2) Rice ... ..	385
This increase is due to greater despatches from the intermediate stations owing to good crops and favourable demands this year.	
(5) Others ... ..	129
The increase under this head is due to greater demands for coolie.	
Oilseeds—(1) Linseed ... ..	37
The river communication being stopped, the merchants are bringing their goods by rail; hence this increase.	
(2) Mustard and rape ... ..	57
The river communication being stopped, the merchants are bringing their goods by rail; hence this increase.	
Sugar—(1) Drained ... ..	14
This increase is due to river communication being stopped, the merchants are bringing their goods by rail.	

## DECREASE.

Jute—(1) Raw ... ..	3
This decrease is due to dull market.	
Provisions—(3) Others ... ..	46
This decrease is due to potatoes being less imported during the month.	
Railway plant and rolling-stock ... ..	31
This decrease is due to less material being carried during the month.	
Silk, raw (Indian) ... ..	81
This decrease is due to less import of tassar cocoons this year.	
Sugar—(2) Undrained ... ..	19
This decrease is due to less demand.	

B. G. MOOKERJEE, Manager, Nalhati State Railway.

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 24th March 1888, on 1,513½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	237,822	2,46,111 5 0	27,05,980 0	6,32,527 13 0	29,073 5 0	8,41,993 7 0	64,854	59,501	1,24,355
Or per mile of railway ...	157 3 2	162 5 2	17,876 0	417 13 8	19 15 8	556 0 6	42 6	39 3	81 9
For previous 11 weeks of half-year ...	2,950,958	35,05,678 11 0	3,94,15,510 30	78,25,818 12 0	2,11,910 5 4	1,10,75,197 13 1	732,220	1,104,012	1,836,232
Total for 12 weeks ...	3,188,780	37,51,789 11 0	4,21,19,420 30	79,08,336 12 0	2,30,884 10 4	1,20,80,394 14 1	797,074	1,263,513	2,060,587
COMPARISON.									
Total for corresponding week of previous year ...	216,015	2,17,194 12 0	28,02,126 20	6,75,574 6 5	19,026 13 1	10,00,031 15 0	72,161	114,000	186,161
Per mile of railway corresponding week of previous year ...	142 6 11	143 6 11	18,464 0	443 6 11	13 1 11	662 11 0	47 6	75 3	123 9
Total to corresponding date of previous year ...	3,008,125	36,17,650 5 10	3,17,50,126 10	81,30,546 0 0	2,24,761 4 7	1,19,81,000 2 3	825,024	1,338,440	2,163,464

\* The decrease in coaching traffic is chiefly in Government traffic, and to some extent in Gya pilgrims owing to the time being inauspicious.

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 24th MARCH 1887.			RECEIPTS FOR WEEK ENDING 24th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 24th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 24th MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
15 9	16,95,682	65	1,513½	2,47,000	6 2	1,513½	4,02,682	399	1,513½	1,24,355	58	1,513½	7,71,035

## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 24th March 1888, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,895	7,552 9 0	62,490 10	4,025 3 0	51 0 0	11,715 12 0	1,916	478	2,394
Or per mile of railway ...	241	132 0 0	1,078 0	70 5 11	0 13 3	204 11 2	33 6	7 9	41 5
For previous 11 weeks of half-year ...	154,124	87,725 6 0	3,74,183 30	23,031 3 0	408 6 0	1,07,821 14 0	26,902	6,474	33,376
Total for 12 weeks ...	168,019	95,277 6 0	3,80,673 30	27,056 6 0	519 6 0	1,19,537 16 0	28,818	6,952	35,770
COMPARISON.									
Total for corresponding week of previous year ...	22,938	13,491 1 4	1,16,112 20	3,815 4 0	71 4 0	17,400 9 4	1,767	1,319	3,086
Per mile of railway corresponding week of previous year ...	399	234 4 7	2,019 10	66 11 2	1 4 9	302 4 0	30 6	22 6	53 2
Total to corresponding date of previous year ...	170,15	90,000 2 8	7,05,281 20	39,716 8 0	671 1 3	1,58,606 12 8	21,669	11,000	32,669

\* The decrease in coaching traffic is chiefly in Government traffic, and to some extent in Gya pilgrims owing to the time being inauspicious.

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 24th MARCH 1887.			RECEIPTS FOR WEEK ENDING 24th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 24th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 24th MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
57½	17,291	302	57½	11,716	206	57½	6,475	103	57½	4,046	171	57½	61,831

## DILDARNAGAR-GHAZIPUR STATE RAILWAY.

Approximate Return of Traffic for week ended 21th March 1888, on 12 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,831	471 12 0	10,124 10	331 1 0	12 8 0	507 2 0	320 1/2	164	484 1/2
Or per mile of railway ...	...	39 7 8	...	28 12 5	1 0 8	67 4 8	...	...	...
For previous 11 weeks of half-year ...	31,510	5,319 11 0	2,43,465 20	5,349 15 0	104 11 0	10,774 5 0	8,735 1/2	1,033	9,768 1/2
Total for 12 weeks ...	34,341	5,790 7 0	2,53,589 10	5,671 4 0	117 3 0	11,582 14 0	9,065 1/2	1,197	10,262 1/2
COMPARISON.									
Total for corresponding week of previous year ...	2,765	470 1 7	10,511 30	437 12 0	11 0 0	918 13 7	320	154	474
For mile of railway corresponding week of previous year ...	...	39 2 10	...	36 7 8	0 14 8	76 9 2	...	...	...
Total to corresponding date of previous year ...	33,361	5,965 1 9	2,45,570 20	6,067 5 0	94 11 9	12,164 8 0	9,120	1,037	10,157

Approximate Statement of gross receipts of the Dildarnagar-Ghazipur State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 20TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 21TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 20TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 21TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Mds.		Rs.	Mds.		Rs.	Mds.		Rs.	Mds.		Rs.
12	010	77	12	408	67	12	47,292	77	12	47,110	77	.....	165

## SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 24th March 1888, on 74 1/2 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	4,382	4,208 4 0	98,414 30	4,153 10 0	129 9 0	8,491 7 0	693	1,295 1/2	2,388 1/2
Or per mile of railway ...	...	57 4 2	...	55 8 8	1 11 8	113 8 4	...	...	...
For previous 11 weeks of half-year ...	56,015	42,548 12 0	9,88,518 10	47,022 15 8	1,405 2 0	91,026 13 0	7,342 1/2	17,547	23,890 1/2
Total for 12 weeks ...	61,977	46,757 0 0	10,76,933 0	51,236 0 0	1,534 11 0	99,518 4 0	8,035 1/2	19,095 1/2	27,131 1/2
COMPARISON.									
Total for corresponding week of previous year ...	5,352	5,253 4 4	85,829 0	3,848 2 0	104 15 9	9,205 6 1	781	1,446	1,067
For mile of railway corresponding week of previous year ...	...	70 15 5	...	51 15 8	1 0 6	123 5 7	...	...	...
Total to corresponding date of previous year ...	60,644	45,208 1 11	12,59,493 30	50,606 5 6	1,233 2 9	1,15,167 10 2	9,140	15,177	24,317

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 20TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 24TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 20TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Mds.		Rs.	Mds.		Rs.	Mds.		Rs.	Mds.		Rs.
74 1/2	9,226	103	74 1/2	8,491	114	74 1/2	8,99,951	103	74 1/2	4,34,126	114	24,174	.....

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 24th March 1888, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	16,058	5,095 4 0	8,103 30	300 1 0	7 0 0	5,803 11 0	876	92	968
Or per mile of railway	.....	246 15 8	.....	13 7 0	0 5 4	240 12 9	.....	.....	.....
For previous 11 weeks of half-year	223,502	68,889 9 0	96,410 50	2,217 8 0	87 13 0	62,154 11 0	10,800	800	10,780
Total for 12 weeks	243,220	61,844 14 0	1,04,574 20	3,547 9 0	75 3 4	67,957 9 0	11,700	902	11,748
COMPARISON.									
Total for corresponding week of previous year	21,436	5,618 12 8	11,101 0	399 6 0	4 0 3	6,023 2 11	809	69	848
Per mile of railway corresponding week of previous year	.....	252 8 0	.....	17 15 2	0 2 11	270 10 7	.....	.....	.....
Total to corresponding date of previous year	242,474	62,880 2 4	1,05,573 10	3,452 8 0	78 6 3	67,091 0 7	11,501	477	12,078

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 20th MARCH 1887.			RECEIPTS FOR WEEK ENDING 21st MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1886 TO 25th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 24th MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	.....
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		
22½	6,322	271	22½	5,803	261	22½	2,63,731	216	22½	2,61,140	230	17,412	.....

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K. AND D., AND ASSAM-BERHAD SECTIONS.)

Approximate Return of Traffic for week ended 17th March 1888, on 676 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-draw.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	112,278	67,127 0 0	4,50,814 0	71,105 0 0	12,764 0 0	1,21,024 0 0	23,632	24,090	48,232
Or per mile of railway	166	99 0 0	651	105 0 0	18 0 0	207 0 0	.....	.....	.....
For previous 10 weeks of half-year	1,321,055	7,30,927 0 0	56,63,990	8,55,088 0 0	1,47,904 0 0	18,34,479 0 0	255,454	129,486	434,940
Total for 11 weeks	1,433,329	7,98,054 0 0	60,87,823	10,26,193 0 0	1,50,708 0 0	18,85,505 0 0	240,086	254,086	504,172
COMPARISON.									
Total for corresponding week of previous year	120,039	61,734 0 0	4,42,372 0	61,060 0 0	12,675 0 0	1,35,378 0 0	30,062	17,731	37,700
Per mile of railway corresponding period of previous year	213	102 0 0	730	101 0 0	2 0 0	203 0 0	.....	.....	.....
Total to corresponding date of previous year	1,556,214	7,41,630 0 0	62,53,054	9,30,691 0 0	1,45,485 0 0	18,17,729 0 0	241,473	230,701	481,174

\* Excluding steamer earnings.

## FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 10th MARCH 1887.			RECEIPTS FOR WEEK ENDING 17th MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1886 TO 10th MARCH 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 17th MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		
608	1,35,378	223	676	1,51,026	223	608	81,22,792	258	648	92,81,036*	297	11,61,944	.....

\* Audited up to 31st December 1887.



## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	24,332	9,180 0 0	55,180 0	4,645 0 0	32 0 0	14,957 0 0	3,668	1,803	5,471
Or per mile of railway ...	195	74 0 0	441 0	39 0 0	.....	120 0 0	.....	.....	.....
For previous 11 weeks of half-year ...	257,149	91,800 0 0	4,95,001 0	44,464 0 0	700 0 0	1,36,964 0 0	51,871	17,352	69,223
Total for 11 weeks ...	281,472	1,00,980 0 0	5,50,241 0	49,309 0 0	732 0 0	1,54,081 0 0	58,541	19,155	77,696
COMPARISON.									
Total for corresponding week of previous year ...	24,802	9,225 0 0	49,033 0	3,487 0 0	28 0 0	12,740 0 0	3,468	1,742	5,210
Per mile of railway corresponding period of previous year ...	195	74 0 0	399 0	28 0 0	.....	102 0 0	.....	.....	.....
Total to corresponding date of previous year ...	243,568	90,903 0 0	4,61,951 0	24,133 0 0	670 0 0	1,21,505 0 0	50,286	18,340	68,626

\* Audited up to week ending 14th January 1888.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 19TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 19TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase 1887-88.	Total decrease 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
125	12,740	102	125	14,067	113	125	5,50,595	44	125	6,45,942*	103	81,347	.....

\* Audited up to week ending 14th January 1888.

## DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 17th March 1888, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	14,532	4,253 0 0	11,002 0	800 0 0	60 0 0	4,113 0 0	2,141	963	3,104
Or per mile of railway ...	169	49 0 0	125 0	9 0 0	1 0 0	48 0 0	.....	.....	.....
For previous 11 weeks of half-year ...	150,952	50,587 0 0	1,60,032 0	15,595 0 0	704 0 0	66,890 0 0	20,503	8,181	28,684
Total for 11 weeks ...	165,484	54,840 0 0	1,70,034 0	16,395 0 0	764 0 0	72,003 0 0	23,006	10,444	33,450
COMPARISON.									
Total for corresponding week of previous year ...	13,721	4,763 0 0	4,004 0	770 0 0	74 0 0	5,616 0 0	2,017	1,380	3,397
Per mile of railway corresponding period of previous year ...	160	55 0 0	47 0	9 0 0	1 0 0	65 0 0	.....	.....	.....
Total to corresponding date of previous year ...	142,001	50,702 0 0	2,10,312 0	20,690 0 0	2,359 0 0	73,735 0 0	24,601	13,103	37,704

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 19TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 19TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase 1887-88.	Total decrease 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
86	4,616	53	86	5,113	59	86	2,60,048	43	86	2,08,375*	59	29,527	.....

\* Audited up to week ending 31st December 1887.

## ASSAM-BEHAR STATE RAILWAY.

(POURNAH SECTION.)

Approximate Return of Traffic for week ended 15th March 1888, on 39 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	2,582	751 0 0	21,358 0	2,204 0 0	23 0 0	2,068 0 0	510	546	1,056
Or per mile of railway	66	19 0 0	548 0	57 0 0	1 3 6	77 0 0	.....	.....	.....
For previous 11 weeks of half-year	21,930	10,452 0 0	2,13,606 0	20,054 0 0	148 5 0	30,051 0 0	5,480	5,440	10,920
Total for 11 weeks	32,512	11,186 0 0	2,30,864 0	22,258 0 0	178 0 0	33,025 0 0	6,000	6,000	12,012
COMPARISON.									
Total for corresponding week of previous year	.....	.....	.....	.....	.....	.....	.....	.....	.....
Per mile of railway corresponding period of previous year	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total to corresponding date of previous year	.....	.....	.....	.....	.....	.....	.....	.....	.....

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Assam-Bihar State Railway.

RECEIPTS FOR WEEK ENDING 19TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 17TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 20TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 17TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.			Rs.						Rs.		Rs.	
.....	.....	.....	30	2,088	77	.....	.....	.....	30	1,20,750*	40	1,20,750	.....

\* Audited up to week ending 31st December 1887

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for the week ending 24th March 1888, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	3,090	1,087 0 3	21,111 20	1,143 12 0	18 4 0	2,237 0 3	500	254	754
Or per mile of railway	111	39 14 0	770 0	41 19 0	0 11 0	42 7 0	.....	.....	.....
For previous 11 weeks of half-year	30,506	13,310 12 9	2,07,012 20	10,712 4 0	317 12 0	24,810 15 9	5,590	4,087	10,396
Total for 11 weeks	30,506	13,310 12 9	2,07,012 20	10,712 4 0	317 12 0	24,810 15 9	5,590	4,087	10,396
COMPARISON.									
Total for corresponding week of previous year	3,037	1,145 0 4	2,000 10	327 0 11	67 13 0	1,899 14 0	500	417	917
Per mile of railway corresponding week of previous year	111	43 8 0	318 0	12 0 0	3 3 0	69 11 0	.....	.....	.....
Total to corresponding date of previous year	31,004	13,567 15 8	2,76,715 0	9,480 8 11	395 4 4	23,860 12 11	6,180	4,717	11,897

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 20TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 24TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 20TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.			Rs.						Rs.		Rs.	
27½	1,000	50	27½	2,267	82	27½	86,575	62	27½	10,824	69	8,808	.....

## TIRHOOT STATE RAILWAY.

Approximate Return of Traffic for the week ending 24th March 1888, on 253 miles open.

	COACHING TRAFFIC.		MERCHANT AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchant.	Total.
		Rs. A. P.	Mds. q.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
gross traffic for the week on 253 miles open	38,719	15,063 6 11	2,02,001 50	20,829 6 0	3,100 1 11	39,993 1 10	7,594	7,860	15,454
per mile of railway	150	61 11 0	781 0	80 7 0	2 11 0	158 13 0	30	31	61
for previous 11 weeks of half-year	473,417	1,91,948 0 1	23,89,670 10	2,37,957 10 0	37,820 11 1	1,96,843 11 2	74,000	92,714	166,714
Total for 12 weeks	512,136	2,07,011 6 0	24,91,671 0	2,57,897 0 0	40,920 0 0	2,06,763 0 0	79,594	100,527	180,121
COMPARISON.									
Traffic for corresponding week of previous year on 216 miles open	36,080	11,503 11 7	1,50,291 10	16,120 11 6	1,042 8 2	35,011 1 3	6,161	6,288	12,449
per mile of railway corresponding week of previous year	167	53 0 0	696 0	74 14 0	7 3 0	162 0 0	28	29	57
Traffic for corresponding date of previous year	410,331	1,39,109 1 4	19,11,770 10	1,93,220 12 6	38,106 0 0	1,77,035 7 4	67,531	87,025	154,556

\* Steam-locomotive earnings excluded in calculating "Total earnings per mile of Railway."

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 24th MARCH 1887.			RECEIPTS FOR WEEK ENDING 24th MARCH 1888.			TOTAL RECEIPTS FROM 1st JAN. 1887 TO 24th MARCH 1887.			TOTAL RECEIPTS FROM 1st JAN. 1887 TO 24th MARCH 1888.			Total increase in 1887-88.	Per cent. increase in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
246	35,011	142	253	39,993	154	216	15,81,773	126	220 15	78,11,427	110	2,22,035	187 1/2

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 17th March 1888

Corresponding week last year

Increase

Receipts from 1st January to 17th March 1888

From 1st January to 19th March 1887

Increase

Miles open, week ending 17th March 1888

Corresponding week last year

Receipts per mile open, week ending 17th March 1888

Corresponding week last year

Increase

8 13 1  
7 1 10

1,985

72 17 1/2

67 5 22

12,653

Miles.

51

51

Rs. A. P.

159 7 10

150 12 6

9 11 4



# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, APRIL 11, 1888.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 7th April 1888.

No.	District and date of return	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
<i>Western Districts.</i>			
<b>BURDWAN DIV.</b>	1 Burdwan Apl. 7, '88	0.03	Weather—seasonable. There are no crops but sesamum and sugarcane. Prospects good. Common rice 11 seers per rupee.
	2 Culna .. ..	0.06	
	3 Bankoora .. 7, '88	0.11	Weather—seasonable. Indigo, cotton, til and boro paddy coming on well. Lands are being prepared for sugarcane. Prices stationary.
	4 Beerbhoom .. 7, '88	Nil	Weather—warm. Sugarcane pressing nearly over; outturn good.
	5 Midnapur .. 7, '88	Nil	Weather—moderately warm. Crops doing well.
	6 Hooghly .. 7, '88	Nil	Weather—very hot. Rain now much wanted for boro dhas and mangoes and for ploughing.
	Howrah .. 9, '88	Nil	Weather—normal. Boro crop promises well.
<i>Central Districts.</i>			
<b>PRESIDENT DIV.</b>	6 24-Pergha Apl. 10, '88	Nil	Weather—hot and dry. No crops on the ground except sugarcane, which flourishes. Ploughing continues.
	7 Nuddea .. 7, '88	Nil	Weather—very sultry; nights foggy and damp. Rubbi harvest over; outturn fair throughout the district. Tillage for early rice in good progress. Indigo sowings large.
	8 Raanighat .. ..	0.28	
	9 Khoolna .. 7, '88	Nil	Weather—hot in daytime, cool south breeze at night. Boro rice promises well. Ploughing going on. Rain wanted.
	10 Jessore .. 7, '88	Nil	Weather—very hot, but cool mornings and evenings. Rain wanted for sowing of paddy and indigo. Prospects of boro in Narail good.
	11 Moorshedabad .. 7, '88	Nil	Weather—getting warmer. Sowing of bhadoi paddy going on. Reaping of rubbi crops over.
<b>MAJSHAHY DIV.</b>	12 Dinagepur Apl. 7, '88	Nil	Weather—hot with strong west winds. Kowai, jute and bhadoi are being sown.
	13 Rajshahye .. 7, '88	Nil	Weather—very hot. Cutting of spring crops continues. Preparation of land for jute and paddy going on. Rain wanted.
	14 Rangpur .. ..	...	Report not received.
	15 Bogra .. 7, '88	Nil	Weather—very hot and dry. High winds all day. State and prospects of crops good. Rain would be acceptable.
	16 Puhna .. 7, '88	Nil	Weather—hot. Rain wanted. Khasari, matar, linseed, gram and wheat almost harvested with poor outturn. Indly and jute are being sown.
	17 Darjeeling .. 7, '88	Nil	Weather—fine. Rain much wanted for the growing crops in the hills. Ploughing for early rice continues in the plains. Prices steady.
	18 Julpigoree .. 7, '88	Nil	Weather—hot and bright. Ploughing for early rice in progress. Sugarcane is being planted. Common rice sells at 21 seers per rupee at the Sudder station.
<i>Eastern Districts.</i>			
<b>DACCA DIVISION.</b>	19 Dacca Apl. 7, '88	Nil	Weather—hot. Rubbi crops are still being gathered. Cultivation of land for paddy continues. Aus paddy and jute are being sown.
	20 Furreedpur .. 7, '88	Nil	Weather—hot. Prospects of crops satisfactory.
	21 Backergunge .. 6, '88	Nil	Weather—seasonable. Prospects of crops good.
	22 Mymensingh .. 6, '88	0.75	Weather—hot and sultry. Prospects of crops good.
	Kishoregunge .. ..	0.42	
<b>CHITTAGONG DIV.</b>	23 Chittagong Apl. 10, '88	0.04	Weather—seasonable. Prospects of standing crops fair. Prices unchanged.
	24 Noakholly .. 6, '88	Nil	Weather—seasonable. Rubbi crops mostly harvested; outturn fair. Sowing of aus has begun.
	25 Tipperah .. 5, '88	Nil	Weather—seasonable; cloudy and cool. Rain wanted. Standing crops getting on nicely. Preparation of lands and sowing of jute and paddy going on briskly.
	Brahmanbariah .. ..	1.07	
	26 Chittagong Hill Tracts .. 3, '88	Nil	Weather—hot with fogs again in the early morning and late at night. Jute cutting nearly finished. Tobacco and chillies doing well.
	Hill Tipperah .. 4, '88	1.10	Weather—hot and windy. Lands are being prepared for early rice. Prospects of boro paddy and chillies fair.

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BEHAR.</b>			
<b>PATNA DIV.</b>	26 Patna Apl. 7, '88	Nil	Weather—hot and dry. <i>Rabbi</i> threshing and opium weighing in progress. Fields are being prepared for <i>cheena</i> crop. Prices of food-grains stationary.
	27 Gaya „ 7, '88	Nil	Weather—reasonable. <i>Rabbi</i> being threshed. Weighing of opium begun. Sugarcane being irrigated.
	28 Shahabad „ 7, '88	Nil	Weather—hot with strong west wind generally at midday. Threshing of <i>rabbi</i> crops still in progress. Sugarcane being planted. Opium collection is over; weighments have begun; outturn expected to be excellent this year.
	29 Darbhanga „ 7, '88	Nil	Weather—hot. Threshing of <i>rabbi</i> crops progressing. Early rice and <i>moong</i> are being sown, and have germinated in parts. Indigo looks well. Prices remain stationary.
	30 Mozafferpur „ 7, '88	Nil	Weather—warm with west winds at midday. Harvesting of <i>rabbi</i> crops approaching completion. Rice, <i>moong</i> and <i>cheena</i> having germinated are thriving.
	31 Sarun „ 7, '88	Nil	Weather—reasonable. <i>Rabbi</i> crops all cut; outturn estimated at 13 annas. <i>Cheena</i> is being sown. Indigo is coming up well.
	32 Champaran „ 7, '88	Nil	Weather—fair and moderately hot; very strong wind prevails. Harvesting of <i>rabbi</i> crops almost finished; they are mostly on threshing floor. Weighing of opium commenced. Indigo sowings are above ground. Fields are being prepared in the Bettiah sub-division for <i>bhadoi</i> and <i>ayhani</i> sowings.
<b>BHAGLPORE DIV.</b>	33 Monghyr Apl. 7, '88	0.02	Weather—hot and dry; west wind prevailing. Harvesting of <i>rabbi</i> crops nearly finished. Threshing has commenced. Prospects of mango crop continue good.
	34 Bhagalpur „ 7, '88	Nil	Weather—reasonable. <i>Rabbi</i> harvest nearly complete. Rain wanted for cultivation and sowing. Sugarcane seedlings doing well.
	35 Purneah „ 7, '88	Nil	Weather—warm. West wind prevails. <i>Rabbi</i> crops nearly harvested. <i>Bhadoi</i> , <i>moong</i> and jute being sown. Rain would do good.
	36 Maldah „ 7, '88	Nil	Days very hot, but nights still fairly cool. High west winds. The long-continued drought is becoming rather serious, especially for the <i>boro</i> and <i>bhadoi</i> paddy. The harvest of <i>rabbi</i> crops is nearly over. The outturn would have been good but for the drought, and is now probably not more than 12 annas. Common rice selling at an average of 23½ seers per rupee.
	37 Sonthal Pergas. „ 7, '88	Nil	Weather—hot with high west winds. Rain wanted for sugarcane. Want of rain has spoilt indigo and <i>rabbi</i> crops except wheat and linseed, which are good. Mango and <i>mohua</i> doing well.
<b>ORISSA.</b>			
<b>ORISSA DIV.</b>	38 Cuttack Apl. 6, '88	Nil	Weather—hot. Ploughing for <i>beali</i> and <i>sarad</i> rice going on, but rain wanted. Cotton in flower. Rice is sold at 20 seers per rupee in town.
	39 Pooree „ 5, '88	Nil	Weather—reasonable; occasionally cloudy with high winds. Ploughing for <i>sarad</i> crop going on. <i>Dalua</i> crop being harvested. <i>Rabbi</i> being gathered. <i>Dalua</i> and miscellaneous crops including mango are in want of water in the Khoorda sub-division. Common rice 24 seers 12 chittacks per rupee in the Sudder sub-division and 25 seers 4 chittacks in the Khoorda sub-division.
	40 Balasore „ 6, '88	0.44	Weather—reasonable. Cultivation going on. Few crops on the ground.
<b>CHOTA NAGPORE.</b>			
<i>South-West Frontier Agency.</i>			
<b>CHOTA NAGPORE DIV.</b>	41 Hazaribagh, Apl. 6, '88	Nil	Weather—reasonable; very warm. <i>Mohua</i> yielding indifferently in parts of the district. Prospects of mango generally good. Condition of agricultural stock fair on the whole. Prices steady.
	42 Lohardugga „ 7, '88	Nil	Weather—hot. <i>Mohua</i> crop good. Harvesting of <i>rabbi</i> going on. Prices steady.
	43 Singhbhum „ 6, '88	0.08	Weather—variable. Slight rain during the week. <i>Rabbi</i> being harvested with fair results. Cotton yielding well. Sugarcane being planted.
	44 Manbhum „ 7, '88	Nil	Weather—hot and dry; considerably hotter than last year. Wheat and barley being harvested; ten annas outturn expected. Sugarcane being planted. <i>Mohua</i> and lac expected to do very well.

Published for general information.

CALCUTTA, REVENUE DEPT.;  
The 10th April 1888.P. NOLAN,  
Secy. to the Govt. of Bengal.

## STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

STOCK IN HAND AS COMPILED ON—

NAMES OF MERCHANTS.	1st week of April 1887.	1st week of May 1887.	1st week of June 1887.	1st week of July 1887.	1st week of August 1887.	1st week of Sept. 1887.	1st week of Oct. 1887.	1st week of Nov. 1887.	1st week of Dec. 1887.	1st week of Jan. 1888.	1st week of Feb. 1888.	1st week of Mar. 1888.	1st week of April 1888.
Baluchatta	Mds. 14,01,000	Mds. 12,47,000	Mds. 14,50,700	Mds. 7,61,000	Mds. 6,72,000	Mds. 6,81,000	Mds. 8,13,000	Mds. 4,88,000	Mds. 3,43,000	Mds. 3,97,000	Mds. 7,34,000	Mds. 8,54,000	Mds. 10,07,000
Colchatta	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Chittore, Gohbarra, Omer- gaur, Hattah, and Gulp Gaur.	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Farshichatta, Fatta, and Jambhaga.	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Talipanga, Chikla, Kaddapara, and Kumbhiganga.	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
At Minor Bazaar (estimated) ...	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Other retail shops, 2,129 in number (estimated).	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Endabhaty, Nowabganja, Bhadrabar, and Chander- nagar.	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Total	29,61,740	26,40,548	25,30,475	29,30,130	19,77,240	27,28,982	18,86,859	17,83,018	16,44,331	16,08,129	20,95,804	22,48,977	25,37,143
On Railway premises on both sides of the river.	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
By Port Com- missioners' re- turns.	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
By Canal returns	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "	" " " "
Grand Total of Stocks	39,47,837	37,17,307	35,76,350	39,38,287	29,89,508	37,28,982	19,38,387	18,43,469	17,45,642	19,40,539	23,06,916	25,35,453	28,91,008
Probable stock available for exportation by sea.	20 lakhs	16½ lakhs	15½ lakhs	10½ lakhs	10½ lakhs	8½ lakhs	8 lakhs	7½ lakhs	5½ lakhs	2½ lakhs	13½ lakhs	14½ lakhs	16½ lakhs.

STATISTICAL DEPARTMENT,  
The 7th April 1888.P. NOLAN,  
Secretary to the Govt. of Bengal.

SUPPLEMENT TO THE CALCUTTA GAZETTE, APRIL 11, 1888.

following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of January 1888.

### IMPORTS INTO CALCUTTA.

[illegible]

\* One muntal of paddy is equivalent to 111 seers of rice.

† Exaggerated as being instructed by local manufacturers.

*The Sea-borne Trade of Calcutta in these Staples during the month of January 1888 was as follows:—*

UNITED STATES FROM ALICUTTA-- Indian ports,																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																</
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The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported to Calcutta during the month of January 1888.

## IMPORTS INTO CALCUTTA.

SPECIFICATION OF ROUTES.	FOOD-GRAINS.					FIBROUS PRODUCTS.		OILSEEDS.		Tea, Indian.	Cotton, raw.	SAX, raw.	SUGAR.		TOBACCO.	
	Rice.	Paddy.	Wheat.	Grain and pulses.	Other food-grains.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.				Drained.	Un-drained.	Bis-path.	Other kinds.
By country boats	25,42,941	1,33,705	40,487	1,56,953	12,114	4,87,987	1,288,501	50,462	1,242	...	7,441	872	1,877	32,345	...	6,381
By river steamers	13,702	...	63	3,019	...	2,36,870	...	443	5,356	44,573	5,445	354	...	...	...	23
By rail	1,56,438	508	77,915	67,540	8,405	...	51,630	4,21,784	56,308	1,033	1,47,731	998	1,250	6,888	...	54
By Eastern Bengal State Railway.	1,56,361	13	493	82,036	12	2,87,610	750,035	13,770	...	6,633	6,485	230	...	14,453	589	6,046
By road	80,420	0,335	51	4,263	...	65,660	20,705	...	...	...	410	...	9,248	35,470	...	1,000
By sea	45,810	...	802	14,914	97	5,113	23,740	...	1,027	1,048	19,434	16	40,754	...	...	172
Grand total of 1888	27,40,872	1,40,730	1,21,023	3,43,547	15,718	10,25,688	2,146,549	3,84,408	79,723	53,187	1,63,346	1,878	62,140	89,788	589	21,000
Imports in January 1887	22,40,013	1,58,501	3,53,462	2,07,534	37,381	11,59,225	1,794,532	2,21,802	91,012	58,180	2,08,022	1,508	33,533	81,704	...	21,300

The following Statement shows the Value, Quantities, and Numbers of the Principal Staples of Traffic exported Inland from Calcutta during the month of January 1888.

## EXPORTS FROM CALCUTTA.

Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.	Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.				European.	Indian.				
<b>BENGAL.</b>							<b>CHOTA NAGPORE.</b>	<b>Rs.</b>	<b>Rs.</b>	<b>Mds.</b>	<b>Mds.</b>	<b>Mds.</b>	<b>No.</b>
Bardwan	2,78,705	220	300	1,350	28,271	74,453	Hazarihath	44,510	.....	71	1,367	4,990	1,367
Berhampur	1,25,244	.....	148	244	15,007	.....	Mandlaon	44,037	.....	.....	.....	8,801	1,367
Midnapore	2,40,382	.....	3,425	.....	16,000	106,376	Total of Chota Nagpore	92,547	.....	71	1,367	13,791	1,367
Hugli	1,22,239	2,767	61	109	2,174	36,776	Grand total of supplies into the Province under the Lieutenant-Governor of Bengal	74,30,002	34,401	15,008	9,897	5,08,758	1,308,710
St. Ferrunaka	1,81,027	10,624	450	.....	8,758	29,008	<b>OTHER PROVINCES.</b>						
Nadua	3,63,276	.....	1,704	185	23,082	40,131	Assam	3,85,304	.....	86	164	32,443	.....
Khulna	68,657	.....	817	.....	6,895	6,110	North-Western Province and Outh	19,73,479	22,550	3,774	405	39,434	291,35
Jessore	49,351	10,680	01	17	6,895	12,855	Punjab	5,62,037	24,640	505	36	.....	20,528
Mooredabad	1,60,567	.....	21	31	2,796	5,495	Central Provinces	24,003	.....	165	21	.....	65,40
Dinapore	10,466	.....	16	24	0,354	29,595	Rajputana States	19,694	10,330	160	.....	.....	1,30
Kajitahye	2,94,065	.....	117	157	19,217	580	Bihar	129	.....	.....	.....	.....	11,90
Ranpore	1,38,969	.....	82	284	20,020	2,510	Nizam's Territory	.....	.....	.....	.....	.....	.....
Bonga	1,38,215	.....	82	284	20,020	2,510	Bombay	4,400	1,310	.....	.....	.....	1,822,30
Darjeeling	37,290	.....	79	52	3,066	.....	Madras	1,41,050	1,604	1,018	223	.....	612,55
Jalpaiguri	83,780	.....	14	27	8,695	840	Pondicherry	1,324	.....	.....	.....	.....	77,30
Dacca	6,88,160	30	369	1,374	21,074	4,341	Burmah	4,00,553	225	848	1,807	.....	1,140,0
Furzedpore	4,71,892	.....	1,121	401	14,564	11,235	Other places	8,650	2,559	16	215	.....	6,981,3
Backergunge	1,31,417	.....	54	.....	28,320	239	Grand Total of 1888	1,09,78,188	16,208	22,806	13,585	74,633	11,904,3
Mymensingh	65,344	.....	24	6	11,160	.....	Exports in January 1887	84,40,000	36,643	22,108	2,600	7,32,179	15,651,7
Tippurah	1,09,142	.....	189	.....	4,175	143,750	<b>The Sea-borne Trade of Calcutta in these Staples during the month of January 1888 was as follows:—</b>						
Obitasing	5,133	.....	70	.....	1,435	100	<b>IMPORTED INTO CALCUTTA—</b>						
Northolly	.....	.....	.....	.....	.....	.....	As.	Rs.	Mds.	Mds.	Mds.	No.	
Total of Bengal	89,33,008	34,231	9,785	4,369	2,72,625	658,397	From Foreign Ports—	.....	.....	.....	.....	.....	.....
<b>BEHAR.</b>							United Kingdom	68,65,000	.....	17,220	.....	7,96,046	5,4
Paina	3,00,005	990	246	305	48,097	91,740	Other Foreign ports	88,888	.....	345	.....	1,02,111	.....
Gya	1,22,265	5,939	16	311	11,920	8,085	Total of Foreign Trade	69,41,283	.....	17,664	.....	8,98,156	5,4
Shahabad	2,40,136	.....	31	504	12,052	32,125	<b>From Indian Ports—</b>						
Manikpur	1,57,635	.....	18	2,891	5,040	6,040	Bombay	47,440	83,786	.....	9,360	68,570	19,0
Barhathunga	5,09,122	.....	1	871	30,642	61,815	Madras	3,800	6,000	.....	111	.....	.....
Barun	2,35,644	.....	3	74	7,108	1,080	Burmah	3,136	.....	.....	.....	.....	.....
Champuran	5,70,000	.....	146	1,633	48,435	48,435	Other Indian ports	.....	.....	.....	.....	.....	.....
Mouhlyr	1,49,814	.....	14	281	11,301	20,835	Total of Interport Trade	53,440	91,078	.....	9,470	80,070	23,4
Bhagpur	2,83,374	230	40	216	19,792	34,408	Grand Total of Im- & Ex- ports in January 1887	99,84,793	61,078	17,686	9,470	10,57,533	29,7
Purneah	1,03,462	.....	35	643	17,636	4,525	.....	78,40,000	40,012	12,974	6,338	643,865	21,1
Makiah	740	.....	.....	.....	6,740	3,620	<b>* As per tariff declaration value.</b>						
Central Pergunnahs	2,25,621	1,629	102	607	24,903	69,230							
Total of Behar	31,04,737	10,230	648	3,731	2,65,741	581,365							
<b>ORISSA.</b>													
Balmore	2,10,070	.....	6,900	478	14,599	186,830							

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of January 1888.

SPECIFICATION OF ROUTES.	COTTON PIECE-GOODS.		COTTON TWIST.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
By country boats	Rs. 2,40,460	Rs. 1,388	Mds. 4,048	Mds. 2,31,074	No. 186,77	186,77
By river steamers	6,46,421	...	600	763	17,220	17,220
By rail	68,16,005	50,610	5,091	7,183	4,78,919	4,78,919
By Eastern Bengal State Railway	29,75,138	...	3,813	1,974	60,831	60,831
By road	8,10,453	11,543	681	131	2,976	2,976
By sea	8,72,444	4,997	7,079	3,335	13,440	13,440
Grand Total of Exports in January	1,09,78,182	69,998	13,599	12,145	5,72,463	5,72,463
Exports in January 1887	84,40,000	36,643	22,108	2,600	7,32,179	7,32,179

**PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE  
HEAD-QUARTER STATION BAZARS OF THE DISTRICTS OF BENGAL  
DURING THE FORTNIGHT ENDING THE  
31st MARCH 1889.**

## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN														
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLU (Sorghum Vulgare.)		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL.																
Western Districts.																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
1	Bardwan	15 0	13 4	14 8	30 0	...	...	18 16	19 8	19 8	24 0	24 6	23 4	...	...	...
2	Bankura	15 0	14 8	16 8	20 0	19 0	22 0	19 8	19 8	20 0	22 0	20 7	14 4	...	...	...
3	Bearbhoon	16 8	13 8	22 8	...	...	...	16 0	15 12	21 0	21 12	21 0	24 0	...	...	...
4	Midnapore	15 0	15 0	16 0	40 0	41 0	...	20 0	22 0	19 0	26 0	25 0	26 0	...	...	...
5	Hooghly	14 0	14 0	14 0	...	...	...	10 0	10 0	10 0	17 0	17 0	18 0	...	...	...
	Howrah	Not available.			...	...	...	14 4	14 0	13 8	20 0	20 0	20 0	...	...	...
Central Districts.																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
	Calcutta	13 8	13 8	14 12	19 5	20 13	22 0	11 13	10 15	9 4	18 5	17 8	19 4	10 2	18 0	21 8
6	24-Pargannah	17 8	16 0	13 8	22 8	22 8	21 4	8 0	8 0	8 0	20 0	20 0	18 4	...	...	...
7	Nudda	16 6	16 0	15 0	32 0	32 0	32 0	14 8	14 8	16 0	18 14	19 0	19 0	...	...	...
8	Khoolna	...	...	...	...	...	...	21 0	21 0	18 0	22 0	23 0	21 0	...	...	...
9	Jessore	13 4	13 4	13 4	...	...	...	16 0	16 0	16 0	24 10	24 10	22 0	...	...	...
10	Moornabadabad	16 0	15 0	15 0	...	...	...	17 0	18 0	16 8	23 0	23 0	23 8	...	...	...
11	Dinapore	18 0	15 0	12 8	21 0	30 0	22 0	18 4	20 0	21 0	22 2	24 8	27 8	...	...	...
12	Rajshahy	17 4	16 8	16 8	45 0	45 0	45 0	18 0	18 8	18 8	22 8	21 12	22 14	...	...	...
13	Rungpore	18 4	11 6	12 8	...	...	...	13 4	18 4	22 8	21 0	20 0	24 10	...	...	...
14	Bogra	15 0	15 0	17 4	...	...	...	15 0	15 0	15 12	23 4	20 4	24 0	...	...	...
15	Pubna	20 0	16 0	21 0	...	...	...	8 0	8 0	8 0	21 12	22 8	21 9	...	...	...
	Darjeeling	10 0	10 0	8 0	11 0	11 0	10 0	5 0	5 0	5 0	14 0	14 0	14 0	...	...	...
17	Julpigore	12 0	13 0	10 0	39 0	20 0	30 0	14 0	14 0	14 0	21 0	20 0	25 0	...	...	...
Eastern Districts.																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
	Dacca	14 8	14 8	12 8	40 0	40 0	26 0	19 8	19 13	16 0	25 0	25 0	19 0	...	...	...
	Farradpore	20 0	17 0	11 0	40 0	40 0	25 0	15 0	15 0	16 0	24 0	24 0	22 0	...	...	...
20	Backergunge	...	...	...	...	...	...	16 0	15 0	17 0	20 4	20 8	19 0	...	...	...
21	Mymensingh	18 18	18 18	18 0	...	...	...	18 0	18 0	19 0	18 8	18 0	16 0	...	...	...

A In sub-divisions retail prices of salt per rupee were:—Culna 10½ seers, Ramnagar 8 seers.

B At Rampore Haut retail price of salt 11½ seers per rupee.

C In sub-divisions retail prices of salt per rupee were:—Ghatal 11 seers, Tumlook 9 seers and Central 9 seers.

D In sub-divisions retail prices of salt per rupee were:—Barrackpore 10 seers, and Jehanabad 10 seers.

E In sub-divisions retail prices of salt per rupee were:—Barnet and Bismillah 8 seers, Waman and Barbery (at Rajshahi) 8 seers, Barrackpore 9 seers.

F In sub-divisions retail prices of salt per rupee were:—Koochib 10 seers, Moharpor and Chaudhury 10 seers, and Chaudhury 9½ seers.

G In sub-divisions retail prices of salt per rupee were:—Bachhira 9 seers, and Chaudhury 10 seers.

H In sub-divisions retail prices of salt per rupee were:—Bachhira and Chaudhury 10 seers.

**SEEDS OF 80 TOLAHS.**

	BALHA OR CUMBU. <i>(Pennisetum typho-</i> <i>-idicum.)</i>	MARUA OR RAGI. <i>(Eleusine Corocana.)</i>
Present return.		
Next preceding return.		
Corresponding return of last year.		
Present return.		
Next preceding return.		
Corresponding return of last year.		

[illegible][illegible][illegible]

KANGNI OR KAKUN. ITALIAN MILLET. ( <i>Setaria italica</i> .)			GRAM, CHANA, CHHOLA, KADALAT, OR SUBAGA. ( <i>Cicer arietinum</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.

1. Ch.	2. Ch.	3. Ch.	4. Ch.	5. Ch.	6. Ch.	7. Ch.	8. Ch.	9. Ch.	10. Ch.
...	...	...	25	8	22	4	24	0	...
...	...	...	18	■	16	0	19	8	...
...	...	...	25	■	22	8	26	0	...
...	...	...	17	0	17	0	18	0	...
...	...	...	19	■	19	0	18	8	...
...	...	...	21	■	20	0	22	8	...

12	4	12	13	19	0	20	4	18	3	19	4
16	0	13	5	...	...	22	13	21	4	21	4
...	...	...	...	...	...	26	10 1/2	22	14	26	10
...	...	...	...	...	...	16	0	16	0	16	0
...	...	...	...	...	...	22	8	20	0	21	4
...	...	...	...	...	...	26	0	23	0	26	0
...	...	...	...	...	...	15	12	16	0	19	0
...	...	...	...	...	...	24	0	21	0	26	4
...	...	...	...	...	...	16	0	14	8	20	0
...	...	...	...	...	...	15	0	15	0	15	0
...	...	...	...	...	...	26	4	18	12	20	0
...	...	...	...	...	...	11	0	11	0	11	0
...	...	...	...	...	...	16	0	13	0	15	4

...	...	...	...	16	0	16	0	15	0
...	...	...	...	18	0	15	0	16	0
...	...	...	...	13	0	13	0	15	0
...	...	...	...	13	■	13	■	15	0

## Head-quarter station Bazars of the Districts of Bengal on the 31st March 1888.

															WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.															
INDIAN-CORN OR MAIZE (Zea Mays.)			ARHAR OR TUR •CAJAN PEA (Cajanus indicus.)			FINEWOOD.			SALT.			SALT.																					
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.																			
BENGAL.																																	
Western Districts.																																	
C.	Ch.	N.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.									
No sale.			24	10	24	10	17	12	120	0	120	0	120	0	10	8	10	8	13	5 1/2	3	9	6	3	11	2	15	3	Hurdwar.				
32	0	32	0	40	0	20	8	20	0	22	■	320	0	320	0	280	0	10	8	10	8	12	8	3	11	0	3	8	■	Bankoor.			
...	...	...	16	8	16	8	16	8	160	0	160	0	160	0	10	0	10	8	12	12	3	4	0	3	6	0	3	0	0	Beerbhoom.			
...	...	...	15	0	13	0	18	0	120	0	120	0	156	0	9	■	9	0	12	12	4	0	0	4	4	0	3	1	0	Midnapore.			
...	...	...	13	0	13	0	14	0	120	0	120	0	120	0	9	0	9	0	13	0	4	8	0	4	6	0	3	0	0	Hooghly.			
...	...	...	13	0	13	0	13	4	100	0	100	0	90	0	9	■	■	2	12	0	3	14	0	4	0	0	3	0	0	Howrah.			
Central Districts.																																	
13	7	21	3	24	9	18	4	18	8	17	0	95	0	95	0	80	0	10	8	9	10	12	0	3	9	6	3	13	7	3	■	0	Calcutta.
20	0	...	23	0	21	4	22	8	16	0	90	■	90	0	100	0	10	■	9	8	13	0	3	■	0	3	14	0	2	15	0	24-Pergunnahs.	
...	...	...	24	10	24	10	19	0	...	...	...	...	...	...	9	2	9	2	11	10 1/2	4	0	0	4	■	0	3	0	0	...	Nuddea.		
...	...	...	...	...	...	...	...	...	160	0	160	0	160	0	8	0	8	0	10	8	...	...	4	8	0	3	12	■	...	...	Khoolna.		
...	...	...	27	0	29	0	■	0	100	0	100	0	110	0	9	10	8	0	11	0	4	2	0	4	4	0	3	4	0	...	Jessore.		
...	...	40	0	23	0	23	0	■	0	200	0	200	0	160	0	11	6	11	0	12	0	3	8	0	3	10	0	3	5	0	Meershedabad.		
...	...	...	18	0	18	0	...	...	160	0	160	0	160	0	9	12	9	12	11	8	4	0	0	3	15	0	5	6	0	...	Dinagapore.		
...	...	...	16	0	16	0	16	4	240	0	240	0	240	0	9	0	8	4	12	0	4	0	0	4	5	4	3	4	0	...	Rajshahye.		
...	...	...	9	■	9	0	8	10	120	0	120	0	120	0	8	10	8	5	11	0	4	10	0	4	13	0	3	8	0	...	Rangpore.		
...	...	...	...	...	...	...	...	...	90	0	90	0	90	0	8	4	8	4	11	4	4	5	4	...	...	3	6	0	...	...	Rogra.		
...	...	...	26	4	26	4	24	0	200	0	200	0	200	0	9	12	9	■	11	4	4	1	6	4	5	0	3	5	0	...	Putta.		
30	0	31	0	30	0	8	0	8	0	■	0	120	0	120	0	120	0	8	0	8	0	9	0	...	...	...	4	6	0	...	Darjeeling.		
30	0	20	■	...	11	0	10	0	12	0	128	0	128	0	128	0	9	0	9	0	11	0	4	4	0	4	6	0	3	6	0	Jalpigore.	
Eastern Districts.																																	
...	...	...	13	5	13	5	...	...	120	0	120	0	120	0	8	8	8	8	12	0	4	4	0	4	4	0	3	4	0	...	Dacca.		
...	...	...	...	...	16	0	130	0	140	0	120	■	9	0	11	0	11	0	11	0	4	5	0	3	4	0	3	5	0	...	Furroodjoro.		
...	...	...	10	10	10	10	14	0	120	0	120	0	120	0	9	4	9	2	12	0	3	12	0	3	12	0	3	4	0	...	Backergungo.		
...	...	...	...	...	10	8	20	0	...	...	...	...	...	...	8	8	9	6	12	0	4	2	0	4	4	0	3	5	0	...	Mymensingh.		

In sub-divisions retail prices of salt per rupee were:—Jungipore 10 seers, Kandi 11 seers and Lalbagh 10 seers.

At Thakurgaon retail price of salt 7 seers per rupee.

In sub-divisions retail prices of salt per rupee were:—Nattore 8½ seers and Nowgong 8 seers.

In sub-divisions retail prices of salt per rupee were:—Nilphamari 9 seers, Gaibanda 7 seers.

At Berhampore retail price of salt 10½ seers per rupee.

Retail price of salt at Biliguri 8 seers and Kurseong 7 seers per rupee.

At Pallacotta in Adipore sub-division retail price of salt 8 seers per rupee.

In sub-divisions retail prices of salt per rupee were:—Manickganj 8 seers, Moonsheegunge 8½ seers, and Narainganj 8 seers.

In sub-divisions retail prices of salt per rupee were:—Patuakhali 8 seers, Ferozepore 9 seers.

In sub-divisions retail prices of salt per rupee were:—Ajmer 10 seers, Jamulpore 8 seers, Bharpore 10 seers, Kishoreganj 8 seers.

## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the Head-quarter

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN																	
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLAM. (Sorghum Vulgare.)					
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
Eastern Districts—concluded.																			
22	Chittagong	11 8	10 9	16 0	...	...	...	14 0	13 0	18 0	21 7	20 4	17 0	...	...	...			
23	Noakhully	...	...	...	...	...	...	10 0	20 0	19 8	21 0	21 0	21 0	...	...	...			
24	Tippurah	12 8	13 8	13 5	...	...	...	17 8	17 8	17 13	25 0	25 0	20 8	...	...	...			
25	Chittagong Hill Tracts.	...	...	...	...	...	...	14 8	14 8	12 4	16 0	16 0	18 14	...	...	...			
	Hill Tippurah	8 0	8 0	12 0	...	...	...	14 0	15 0	12 0	20 0	28 0	17 0	...	...	...			
BEHAR.																			
26	Patna	20 0	18 0	16 0	30 0	29 0	32 0	11 8	11 8	11 8	21 8	20 8	24 0	28 0	22 0	20 0			
27	Gya	17 8	15 8	17 0	25 0	24 0	26 0	10 0	10 0	11 0	19 0	18 0	19 8	...	...	...			
28	Shahabad	19 8	14 8	16 0	28 8	23 8	38 0	15 0	10 8	9 0	18 0	18 5	17 8	...	...	...			
29	Darbhanga	18 0	13 8	18 0	26 0	35 0	30 0	12 0	14 8	14 0	20 0	20 12	23 0	...	...	...			
30	Muzaffarpore	14 0	13 6	13 8	30 8	30 0	30 0	12 0	12 0	12 8	20 0	20 0	23 0	...	...	...			
31	Saran	17 0	16 0	16 0	27 0	26 12	29 0	8 8	8 8	8 0	20 12	21 10	22 8	...	...	...			
32	Champaran	11 0	11 0	16 0	10 0	30 0	30 8	8 0	12 0	7 8	20 0	19 0	18 8	...	...	...			
33	Monghyr	20 0	10 8	18 0	29 7	24 2	33 8	13 14	13 14	14 2	17 13	17 13	18 8	...	...	27 8			
34	Bhagalpore	15 2	15 2	10 0	30 6	30 6	40 6	16 6	16 8	18 4	20 8	21 8	21 7	...	...	...			
35	Furneah	16 0	16 0	16 0	26 8	26 8	...	20 0	21 0	20 0	24 0	23 0	22 0	...	...	...			
36	Maldah	19 0	18 8	18 0	...	...	...	14 0	13 0	18 0	23 0	23 0	26 0	...	...	...			
37	Southal Parghs.	11 0	11 0	12 0	...	...	...	16 8	16 0	18 0	22 0	21 0	27 8	...	...	...			
ORISSA.																			
38	Cuttack	16 12	14 7	14 7	...	...	...	10 8	10 8	13 8	31 0	31 0	16 0	...	...	...			
39	Pooree	14 7	13 2	10 8	...	...	...	17 1	17 1	16 12	23 10	23 10	26 4	...	...	...			
40	Balasore	15 0	15 0	18 0	13 0	13 0	13 0	14 0	14 0	14 0	27 0	25 0	25 0	...	...	...			
CHOTA NAGPORE.																			
South-West Frontier Agency																			
41	Hazaribagh	15 0 (ordinary.)	16 0	19 0	23 0	20 0	25 0	8 0	9 0	11 0	16 0	16 8	20 0	...	...	...			
42	Lohardugga	15 12	15 0	24 0	28 0	30 0	22 0	15 8	16 0	19 0	19 8	18 0	24 0	...	...	...			
43	Singbhoom	13 0	12 0	24 0	30 0	16 0	34 0	18 0	14 0	28 0	22 0	22 0	32 0	...	...	...			
44	Mamhoom	15 0	12 0	17 0	32 0	32 0	40 0	15 0	15 0	18 0	29 0	29 0	32 0	...	...	...			

R At Cox's Bazar retail price of salt 6½ seers per rupee.

T At Panchgatchia retail price of salt 7 seers per rupee.

U In sub-divisions retail prices of salt per rupee were:—Durgam 10 seers, Bhatnagar 9½ seers, and Sonamukhi 10 seers.

V In sub-divisions retail prices of salt per rupee were:—Tajpore 9 seers and Malhabani 10 seers.

W In sub-divisions retail prices of salt per rupee were:—Bhatnagar 8 seers and Hajipore 9½ seers.

X At Bettiah retail price of salt 9 seers per rupee.

Published for general information

CALCUTTA.  
The 10th April 1888.

## Station Bazars of the Districts of Bengal on the 31st March 1888—(concluded.)

INDIAN-CORN OR MAIZE. (Zea Mays.)												ARHAR OR TUR. CADJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			SALT.			DISTRICTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.							
WHOLESALE PRICES PER MAUND OF 10 SEERS.																		DISTRICTS.						
Eastern Districts—concluded.																		DISTRICTS.						
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.							
...	...	...	10 0	9 0	10 0	110 0	110 0	75 0	S 8 0	7 0	12 0	4 4 0	4 10 0	3 0 0	Chittagong.									
...	...	...	...	...	...	...	...	...	T 7 0	7 0	8 0	4 12 0	4 10 0	4 0 0	Norchothy.									
...	...	...	10 0	8 0	11 1	...	...	...	8 0	8 0	11 8	4 8 0	4 8 0	3 5 0	Tippur.									
...	...	...	...	...	...	320 0	320 0	320 0	0 6	0 6	0 0	5 0 0	5 0 0	4 5 0	Chittagong Hill Tracts.									
...	...	...	12 0	12 0	15 0	...	...	...	0 0	0 0	11 0	4 4 0	4 4 0	3 0 0	Hill Tipperah.									
BEHAR.																		DISTRICTS.						
29 0	20 0	30 0	5 0	27 0	27 0	120 0	120 0	120 0	0 0	0 0	19 0	11 8	3 12 0	3 12 0	3 1 8	Patna.								
...	...	...	20 4	18 8	26 0	160 0	160 0	140 0	0 8	0 8	11 0	4 4 0	4 4 0	3 5 0	Gya.									
22 8	22 8	...	15 8	15 0	13 8	160 0	120 0	160 0	10 0	10 0	12 0	...	...	3 5 0	Shahabad.									
27 0	25 12	28 0	17 0	16 12	19 8	160 0	160 0	176 0	10 0	9 8	13 0	3 10 0	3 13 0	3 0 0	Darbhanga.									
27 8	27 0	30 0	20 0	22 0	19 0	160 0	160 0	140 0	10 0	9 8	2 0	3 13 0	4 2 0	3 4 0	Muzafferpore.									
26 8	25 14	28 0	23 0	21 0	21 0	160 0	160 0	160 0	10 0	9 8	1 0	3 14 0	4 2 0	3 8 0	Saran.									
28 0	30 0	30 0	0 0	10 0	21 0	160 0	160 0	160 0	0 0	0 0	11 0	4 0 0	4 4 0	3 7 0	Champaran.									
31 8	26 4	29 0	21 0	18 14	21 0	126 0	126 0	126 0	10 0	10 8	12 9	3 5 8	3 5 0	3 0 0	Monghye.									
28 8	26 8	35 6	17 10	17 10	21 7	184 0	184 0	171 0	10 1	10 1	12 10	3 12 0	3 12 0	3 3 0	Bhagalpore.									
...	...	...	16 0	16 0	16 0	120 0	120 0	128 0	8 8	8 8	10 8	4 11 0	4 13 0	3 10 0	Purneah.									
...	...	...	...	...	...	120 0	120 0	130 0	0 0	0 0	12 0	4 4 0	4 4 0	3 4 0	Mahab.									
...	29 0	37 8	24 0	24 0	26 0	200 0	200 0	200 0	9 8	9 8	11 8	3 15 0	4 11 0	3 4 0	South Pargis.									
ORISSA.																		DISTRICTS.						
...	...	...	19 11	18 6	...	80 0	80 0	80 0	10 8	10 0	14 0	3 13 0	3 14 0	2 12 0	Cuttack.									
...	...	...	17 1	17 1	17 1	80 0	70 0	70 0	10 8	9 4	14 7	3 8 0	3 12 0	2 10 0	Pooree.									
...	...	...	13 0	13 0	13 0	200 0	200 0	180 0	9 4	8 8	10 8	4 4 0	4 7 0	3 0 0	Balasore.									
CHOTA NAGPORE South-West Frontier Agency.																		DISTRICTS.						
20 0	20 0	24 0	21 0	20 0	20 0	320 0	320 0	320 0	0 0	0 0	10 0	4 6 8	4 6 0	3 10 0	Bazarilugh.									
...	...	24 0	26 0	...	24 0	140 0	140 0	120 0	8 1	9 6	10 0	4 10 0	4 4 0	3 12 0	Lodharlugan.									
...	...	...	20 0	19 0	24 0	320 0	320 0	320 0	0 0	0 0	9 0	4 13 0	...	4 0 0	Singbhoon.									
20 0	20 0	40 0	21 8	22 0	22 0	240 0	240 0	240 0	0 0	0 0	10 10	4 8 0	4 4 0	3 6 0	Maubhoon.									

Y In sub-divisions retail prices of salt per rupee were—Begusarai 8½ seers and Jamui 9 seers.

Z In sub-divisions retail prices of salt per rupee were—Kishoreganj 10 seers and Arrah (at Kishoreganj) 10 seers.

Za At Bhadrachal retail price of salt 8 seers per rupee.

Zb At Bhatnagar retail price of salt 8½ seers per rupee.

Zc At Bhatnagar retail price of salt 11 seers per rupee.



**PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt in the**

Number.	MARKS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	2 11 0	2 12 10	2 12 6	1 13 6	1 10 6	1 6 0	3 2 8	3 8 7	3 7 0	1 15 0	2 1 4	1 14 0
2	Beraingunge ...	2 0 0	2 0 0	2 0 0	...	...	...	3 6 0	3 8 0	3 14 0	1 14 0	1 14 0	1 12 6
3	Dacca ...	2 11 0	2 12 0	2 0 0	0 16 6	1 0 0	1 8 0	1 14 6	1 16 0	2 8 0	1 9 0	1 9 0	2 1 0
4	Naraingunge ...	...	...	...	...	...	...	2 0 0	2 4 0	2 6 0	1 12 0	2 0 0	1 12 0
5	Chittagong ...	3 6 0	3 8 0	2 6 0	...	...	...	2 12 0	2 12 0	2 14 0	1 14 0	1 15 0	2 4 0
6	Patna ...	1 15 0	2 6 0	2 7 0	1 4 6	1 5 0	1 3 6	3 0 0	3 0 0	3 0 0	1 14 0	1 12 6	1 10 6
7	Balasore ...	2 8 0	2 4 0	2 4 0	3 0 0	3 0 0	3 0 0	2 12 0	2 12 0	2 12 0	1 6 0	1 8 0	1 7 0
8	Poorce ...	...	...	...	...	...	...	...	...	...	1 8 0	1 8 0	1 6 6
9	Cuttack ...	2 5 0	2 10 0	2 10 0	...	...	...	3 10 0	3 10 0	3 0 0	1 11 0	1 11 0	2 2 0

CALCUTTA.

The 10th April 1888.

# PRICES PER MAUND

BAR OR CHOLU.  
(*Pennisetum Vulgare.*)

BAJRA OR CUMBU.  
(*Pennisetum typhoides.*)

	Next preceding return.		Corresponding return of last year.		Present return.	Next preceding return.		Corresponding return of last year.	
	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.
	4 1 2	4 8 1	8 0 2	8 6 3	2 2 2	4 0			
..	...	...	...	...	...	...			
..	...	...	...	...	...	...			
..	...	...	...	...	...	...			
..	...	...	...	...	...	...			
6 0 1	12 0 1	6 0	...	...	1 6 0				
..	...	...	...	...	...	...			
..	...	...	...	...	...	...			
..	...	...	...	...	...	...			

OF 40 SEERS.

MARUA OR RAGI. ( <i>Eleusine Corocana</i> .)			KANGNI OR KATUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)		
Present return	Next preceding return.	Corresponding return of last year.	Present return	Next preceding return.	Corresponding return of last year
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
...	...	...	3 0 0	3 0 1	2 4
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	6 0	1 8 0	1 5 0	1 14
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

undermentioned *Marts* of Bengal on the 31st March 1888.

GRAM, CHANA, CHHOLA, CADALAY OR SUNAUA. ( <i>Cicer Aristinum</i> .)			INDIAN-CORN OR MAIZE. ( <i>Zea Mays</i> .)			ARHAR OR THUR CADJAN PEA. ( <i>Cajanus indicus</i> .)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
1 11 10	1 15 5	1 11 3	3 0 2	1 8 8	1 4 0	1 14 5	1 15 1	2 2 6	0 6 8	0 6 8	0 6 9	3 2 5	3 13 7	3 0 0	Calcutta.
2 8 0	2 4 0	2 0 0	...	...	...	...	...	...	...	...	...	3 14 0	3 14 0	3 0 0	Sonabur.
2 7 0	2 8 0	2 8 0	...	...	...	2 15 0	3 0 0	...	0 5 0	0 5 3	0 5 0	4 4 0	4 4 0	3 4 0	Dacca.
2 4 0	2 8 0	2 14 0	...	...	...	2 8 0	3 0 0	...	0 10 0	0 10 0	0 6 0	4 0 0	5 0 0	3 15 0	Nurainur.
2 14 0	4 8 0	3 2 0	...	...	...	2 12 0	4 0 0	3 12 0	0 5 0	0 5 0	0 8 0	4 4 0	4 10 0	3 0 0	Chittagong.
1 4 5	1 7 0	1 5 6	1 5 0	1 5 0	1 4 9	1 8 0	1 7 0	1 6 0	0 5 0	0 5 0	0 5 0	3 12 0	3 12 0	3 1 0	Patna.
2 8 0	2 14 0	2 8 0	...	...	...	3 0 0	3 0 0	2 2 0	0 4 0	0 4 0	0 5 0	4 4 0	4 7 0	3 6 0	Bahar.
...	...	...	...	...	...	...	...	...	...	...	...	3 8 0	3 12 0	3 10 0	Poor.
1 11 0	1 11 0	2 2 0	...	...	...	2 0 0	2 2 0	...	0 8 0	0 8 0	0 8 0	3 13 0	3 14 0	2 12 0	Cuttack.

Published for general information.

P. NOLAN,  
Secy. to the Govt of Bengal.

## Meteorological Report of the Province

METEOROLOGICAL DIVISIONS	DISTRICT.	Representative stations.	STATION OBSERVATIONS.															
			AIR PRESSURE.					TEMPERATURE.						HUMIDITY.		CLOUD.		
			Highest, 10 A.M., lowest, 10 P.M., of month.	Lowest, 10 A.M., highest, 10 P.M., of month.	Mean, 10 A.M., of month.	Mean reduced to sea-level.	Variation from normal mean.	Highest of month.	Lowest of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.
			Highest, 10 A.M., lowest, 10 P.M., of month.	Lowest, 10 A.M., highest, 10 P.M., of month.	Mean, 10 A.M., of month.	Mean reduced to sea-level.	Variation from normal mean.	Highest of month.	Lowest of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.	Mean of month.
ORISSA.	Pooree	Pooree	30.081	29.381	29.732	29.704	—	100.2	72.0	86.3	76.1	81.8	—	80	—	24	—	7.0
	Pooree	Gopalpora	30.081	29.781	29.903	29.956	—0.03	88.2	63.0	81.2	73.4	80.3	+1.4	72	—	4.8	—	7.0
	Pooree	False Point	30.081	29.727	29.838	29.920	—0.05	85.5	63.0	81.3	73.3	80.1	—0.2	73	—	2.2	—	6.0
	Cuttack	Cuttack	29.995	29.713	29.854	29.904	+0.06	103.4	64.8	88.2	76.8	82.4	—2.1	87	—	1.0	—	1.0
SOUTH-WEST BENGAL.	Balasore	Balasore	29.977	29.750	29.864	29.914	—0.08	99.3	60.8	81.5	69.8	81.3	+1.3	—	—	9.7	—	1.3
	South-West and South 34-Pergunnahs.	Saugor Island	29.917	29.786	29.932	29.954	0	81.7	64.4	87.1	70.3	81.7	+0.8	78	0	4.0	+0.4	0.4
	Midnapore	Midnapore	29.904	29.665	29.801	29.862	+0.07	107.3	69.7	91.8	80.9	83.8	+2.4	44	—	1.1	—	2.2
	34-Pergunnahs, Howrah and Hooghly.	Calcutta	29.915	29.771	29.843	29.887	—0.15	98.9	62.5	81.2	70.4	80.8	+0.8	8	—	2.3	—	2.3
SOUTH-EAST BENGAL.	Burdwan	Burdwan	29.913	29.871	29.892	29.921	—0.13	101.7	67.0	88.0	68.8	82.3	+1.3	42	—	1.9	—	0.0
	Bankura	Bankura	29.781	29.641	29.709	—	—	106.1	61.7	87.7	69.8	82.7	—	87	—	0.7	—	0.0
	West Burdwan and Beerbhoom.	Ranigunj	29.717	29.540	29.758	29.806	—0.02	104.8	61.1	88.7	69.4	83.0	+2.2	33	—	1.0	—	0.1
	Moondohat	Barhampore	29.778	29.673	29.725	29.856	—0.02	105.7	67.2	83.9	66.7	80.3	+0.7	52	—	2.1	—	1.3
SOUTH-BENGAL.	Nuddea	Krishnanagar	29.917	29.800	29.858	29.912	—	100.3	63.9	91.1	67.2	80.7	—	42	—	2.4	—	0.7
	Jessore and Khoolna	Jessore	29.859	29.751	29.805	29.852	—0.05	101.3	64.0	83.7	68.1	81.3	+0.8	63	—	3.4	+0.8	1.0
	Chittagong	Chittagong	29.880	29.715	29.798	29.881	+0.01	88.0	59.1	85.4	68.4	76.0	0	72	—	4.7	+1.7	1.0
	Chittagong Hill Tracts	Dumkari	30.027	29.840	29.934	29.953	+0.20	97.8	67.1	83.0	69.7	79.3	+1.1	68	—	3.8	—	1.3
SOUTH-BENGAL.	Backerganj	Barisal	30.004	29.802	29.923	29.967	+0.06	88.7	63.3	84.2	69.8	77.1	+0.3	80	—	5	—	1.0
	Noukhally	Noukhally	30.008	29.743	29.874	29.954	+0.14	95.5	63.5	86.5	67.1	76.8	—1.8	69	—	1.5	—	4.2
	Farredpore	Farredpore	30.040	29.798	29.922	29.945	+0.07	95.1	67.9	89.1	68.3	79.2	—0.1	66	—	3.8	+0.8	0.0
	Dacca	Dacca	30.040	29.772	29.903	29.959	+0.14	94.3	61.0	85.1	67.3	78.0	+0.4	67	—	3.6	—	3.8
SOUTH-BENGAL.	Comilla	Comilla	30.070	29.838	29.954	29.982	+0.08	91.3	65.1	86.3	68.5	76.4	+2.3	71	—	4.6	—	—
	Mymensingh	Mymensingh	30.056	29.842	29.949	29.970	—0.18	101.8	64.6	88.9	65.4	78.2	—	67	—	2.1	—	0.4
	Bogra	Bogra	30.058	29.882	29.970	29.983	+0.07	107.9	63.0	88.7	67.1	76.9	+0.2	68	—	3.1	—	1.3
	Pubna	Sernajung	30.058	29.882	29.970	29.983	+0.07	107.9	63.0	88.7	67.1	76.9	+0.2	68	—	3.1	—	1.3
SOUTH-BENGAL.	Rajahmundry	Rajahmundry	30.054	29.867	29.960	29.989	+0.17	98.4	63.7	89.0	68.8	76.3	—1.8	55	—	1.2	—	0.0
	Malda	Malda	29.933	29.710	29.821	—	—	93.7	61.9	83.8	62.1	79.0	—	43	—	1.6	—	0.0
	Dinapore	Dinapore	29.944	29.810	29.877	29.923	+0.04	94.6	61.7	80.7	67.6	76.8	+0.8	59	—	1.8	—	0.0
	Rungpore	Rungpore	29.922	29.851	29.886	29.911	+0.08	93.0	64.4	83.8	63.3	73.8	+1.0	48	—	2.4	—	2.7
SOUTH-BENGAL.	Jalpaiguri and Goalpara	Jalpaiguri	29.722	29.651	29.686	29.811	+0.08	93.0	64.4	83.8	63.3	73.8	+1.0	48	—	2.4	—	2.7
	Darjeeling Hill Tracts	Darjeeling	29.122	29.670	29.912	—	+0.21	84.1	35.4	64.6	46.1	60.9	+0.9	79	+8	6.4	+1.3	1.0
	Faridpur and North Bhawalpur.	Faridpur	29.904	29.808	29.856	29.933	+0.05	97.3	63.8	89.7	62.8	76.3	+0.8	54	—	1.0	—	—
	Moulvibazar	Moulvibazar	29.671	29.658	29.752	29.923	0	93.5	63.4	88.8	68.1	76.8	+1.2	57	+3	9.8	—	2.0
SOUTH-BENGAL.	Darbhanga	Darbhanga	29.768	29.668	29.768	29.806	—0.03	98.0	62.2	86.4	68.8	76.8	+0.3	44	—	1.9	—	2.0
	Champaran	Motihari	29.834	29.617	29.713	29.810	+0.01	91.3	65.2	89.7	63.8	76.8	—0.1	62	—	0.2	—	0.0
	Barua	Chupra	29.693	29.507	29.602	29.617	—0.15	101.3	61.0	84.4	68.5	81.3	+4.7	28	—	0.8	—	0.0
	Shahabad	Huzar	29.825	29.690	29.757	29.818	+0.01	98.4	64.4	82.5	64.8	78.7	+1.0	86	—	0.9	—	0.0
SOUTH-BENGAL.	Gya	Arrah	29.824	29.500	29.703	29.801	—0.07	101.4	64.2	88.5	63.8	78.6	+1.3	34	—	0.6	—	0.0
	Gya	Gya	29.682	29.552	29.616	29.665	—0.31	103.0	68.0	90.6	67.3	81.1	+1.5	39	+1	1.7	—	0.0
	Patna	Bankipore	29.806	29.640	29.723	29.801	—0.10	100.5	64.4	82.5	64.8	79.7	+1.5	34	—	1.3	—	0.0
	South Bhagalpur and Goalpara.	Bhagalpur	29.879	29.540	29.766	29.819	+0.08	98.4	68.0	91.8	64.4	78.1	+1.0	39	—	0.8	—	0.0
SOUTH-BENGAL.	South Bhagalpur	Naya Doocha	29.729	29.522	29.625	—	+0.08	102.7	63.4	83.9	68.8	80.1	+1.0	38	—	0.9	—	0.0
	Baranagar	Baranagar	29.828	29.608	29.768	29.823	+0.12	97.6	67.8	90.5	68.8	78.8	+0.8	33	—	0.9	—	0.0
	Ichhar naga and Manikpur.	Manikpur	29.804	29.682	29.743	29.808	—0.01	97.3	68.0	90.1	65.0	77.8	+1.8	3	—	1.3	—	0.0
	Bhagalpur	Chyabasa	29.875	29.690	29.781	—	+0.06	104.8	64.4	90.5	67.6	83.1	+0.8	30	—	0.9	—	0.0
SOUTH-BENGAL.	Silchar	Silchar	29.778	29.510	29.644	29.693	+0.08	98.7	67.7	88.8	61.9	79.4	+1.3	34	+8	6.4	—	0.0
	Assam	Dhubri	29.808	29.638	29.723	29.848	—0.05	98.8	68.9	90.4	68.7	78.3	+0.1	68	+3	9.8	—	0.0
	Assam	Nizhar	29.801	29.610	29.705	29.861	—0.18	105.5	68.1	90.3	64.1	75.8	+1.3	71	—	0.9	—	0.0
	Assam	Assam	29.801	29.610	29.705	29.861	—0.18	105.5	68.1	90.3	64.1	75.8	+1.3	71	—	0.9	—	0.0

Mean of 24 days.  
Mean of 10 days.  
Mean of 10 days.

normal for the month of March 1888.

DISTRICT OBSERVATIONS.											Representative stations.	DISTRICT.	Meteorological Division.			
RAINFALL.																
Of month.					Since 15th May 1887.											
Mean of district.	Normal mean.	Variation from mean.	Number of rainy days.	Normal maximum of rainy days.	Mean of district.	Normal mean.	Variation.	Mean number of rainy days.	Normal maximum of rainy days.							
0.08	0.40	-0.32	1.0	2.3	45.65	59.22	-13.57	267	88.3	Poona	Poona	INDIA.				
0.08	0.40	-0.32	1.0	2.3	45.65	59.22	-13.57	267	88.3	Gopalpore	Poona					
0.08	0.40	-0.32	1.0	2.3	45.65	59.22	-13.57	267	88.3	Falee Point	Poona					
0.08	1.18	-0.55	1.2	2.3	48.02	61.69	-0.67	80.8	80.0	Cuttack	Cuttack	SOUTH-WEST BENGAL.				
0.08	1.35	-0.72	1.5	2.8	46.18	60.39	-10.20	72.0	82.7	Balasore	Balasore					
0.08	1.31	-0.48	1.7	2.6	62.83	65.12	-2.29	68.7	90.4	Saugor Island	South-West Midnapore and South 24-Pargannas.					
0.10	1.08	-0.98	1.0	2.9	63.07	64.24	-0.67	72.2	77.3	Midnapore	Midnapore	SOUTH-WEST BENGAL.				
1.07	1.64	-0.47	2.8	3.2	44.28	66.07	-10.79	62.3	96.8	Calcutta	6-Permanah, Howrah, and Hooghly.					
0.75	1.40	-0.75	2.3	2.9	48.01	40.23	-1.23	78.3	81.0	Burdwan	Burdwan					
0.13	1.26	-1.13	0.8	2.8	01.59	54.25	-1.60	27.4	87.8	Bankura	Bankura	SOUTH-WEST BENGAL.				
0.34	0.65	-0.31	1.0	2.6	40.08	54.11	-5.03	80.0	88.3	Raniganj	West Burdwan and Beerbhoom.					
0.04	0.94	-0.40	2.7	2.3	60.60	61.38	+0.02	84.4	82.9	Berhampore	Mooredahad					
0.14	1.75	-0.30	2.3	2.1	46.29	62.32	-0.73	80.2	85.4	Krishnagar	Nuddea	SOUTH-WEST BENGAL.				
1.80	2.25	-0.55	3.1	3.7	45.31	57.33	-12.01	83.5	91.6	Jessore	Jessore and Khosha					
1.30	2.10	-0.74	0.5	3.5	102.43	117.43	-15.00	115.3	113.4	Chittagong	Chittagong					
1.01	2.07	-1.00	4.5	4.0	40.06	86.00	-10.14	115.0	120.7	Dumra	Chittagong Hill Tracts	SOUTH-WEST BENGAL.				
1.62	2.20	-0.58	4.0	4.0	61.02	61.33	-17.51	100.2	113.6	Harsial	Bacherganj					
0.74	5.71	-0.69	7.5	8.3	78.53	114.26	-38.63	104.6	117.4	Noakhali	Noakhali					
4.00	2.02	+2.02	4.7	4.4	41.71	60.23	-18.52	73.7	84.6	Baroodpore	Baroodpore	SOUTH-WEST BENGAL.				
4.97	3.00	+1.97	6.8	4.0	47.58	65.23	-17.73	64.0	95.9	Dacca	Dacca					
0.73	3.03	+1.75	5.8	5.5	60.17	76.48	-20.41	65.6	106.2	Comilla	Comilla					
2.41	2.18	+0.25	4.4	4.1	63.77	70.79	-7.02	80.8	90.1	Mymensingh	Mymensingh	SOUTH-WEST BENGAL.				
0.58	1.14	-0.56	2.8	2.6	61.54	66.19	+2.42	77.3	82.6	Bogra	Bogra					
1.08	1.47	-0.43	4.6	3.3	47.49	58.13	-8.63	80.0	60.3	Serajgunj	Pabna					
1.20	0.85	+0.35	3.0	2.3	61.90	65.63	-3.73	68.0	81.0	Rampore Bazar	Rajshahi	SOUTH-WEST BENGAL.				
0.17	0.61	-0.45	1.6	1.9	47.08	60.12	-9.00	75.5	80.1	Baidah	Baidah					
0.80	0.70	-0.01	1.6	1.8	76.98	67.30	+12.78	82.0	81.2	Dumra	Dumra					
2.40	1.40	+1.00	3.3	2.8	68.00	75.20	+8.21	82.1	79.9	Rangpur	Rangpur	SOUTH-WEST BENGAL.				
2.38	1.80	+0.58	5.0	5.2	120.70	112.78	+7.92	98.0	102.5	Jalpaiguri	Jalpaiguri and Cooch Behar.					
2.30	2.00	+0.30	6.4	4.4	121.81	123.71	-1.90	129.6	120.0	Darjeeling	Darjeeling Hill Tracts					
0.82	0.47	+0.35	1.0	1.8	66.34	69.03	+7.43	75.0	72.4	Purnea	Purnea and North Banchura.	SOUTH-WEST BENGAL.				
1.23	0.50	-0.69	1.9	1.5	48.57	44.31	+8.36	62.7	60.0	Mouzerpore	Mouzerpore					
0.20	0.28	-0.08	1.0	1.3	50.96	45.11	+5.85	67.0	59.9	Burhanpur	Burhanpur					
0.15	0.28	-0.13	0.5	1.2	40.97	47.34	+6.37	57.5	60.3	Mothari	Champan	SOUTH-WEST BENGAL.				
0.12	0.23	-0.10	0.7	1.2	40.37	48.32	+7.95	67.3	60.0	Chopra	Sarus					
0.04	0.08	-0.04	0.5	1.5	60.05	41.18	+18.87	80.2	64.5	Dahra	Dahra					
0.04	0.41	-0.37	0.5	1.5	30.20	42.15	-11.95	61.3	60.4	Gya	Gya	SOUTH-WEST BENGAL.				
0.04	0.08	-0.04	0.3	1.5	30.21	42.31	-12.10	59.1	65.3	Bankipore	Patna					
0.04	0.08	-0.04	0.3	1.3	46.43	44.08	+2.35	62.3	60.5	Bhagalpur	South Bhagalpur and Monghyr.					
0.04	0.08	-0.04	0.7	1.5	30.41	41.00	-10.59	61.2	70.1	Naya Dooars	South Bhagalpur	SOUTH-WEST BENGAL.				
0.04	0.08	-0.04	0.3	1.5	40.07	41.15	-11.08	71.3	60.1	Hazratnagar	Hazratnagar					
0.04	0.08	-0.04	0.3	1.5	40.75	40.18	+0.57	74.1	67.6	Barh	Barh and Mahabubnagar.					
0.04	1.08	-1.04	0.3	1.1	45.03	46.00	-0.97	79.4	60.0	Chyabura	Chyabura	SOUTH-WEST BENGAL.				
0.04	0.08	-0.04	0.3	1.1	45.03	46.00	-0.97	79.4	60.0	Subsagar	Subsagar					
0.04	0.08	-0.04	0.3	1.1	45.03	46.00	-0.97	79.4	60.0	Dubai	Assam					
0.04	0.08	-0.04	0.3	1.1	45.03	46.00	-0.97	79.4	60.0	Shabar	Shabar	SOUTH-WEST BENGAL.				
0.04	0.08	-0.04	0.3	1.1	45.03	46.00	-0.97	79.4	60.0	Shabar	Shabar					
0.04	0.08	-0.04	0.3	1.1	45.03	46.00	-0.97	79.4	60.0	Shabar	Shabar					

### Table of Rainfall recorded at Station

[illegible]

**Bengal in March 1888.**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Least rainfall during the month.	Total rainfall from 1st January up to 31st Mar. 1908.	Average rainfall from 1st January up to 31st Mar. 1908.	Station.	District.	Meteorological division.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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**Bangal in March 1888--continued.**

[illegible]

### Table of Rainfall recorded at Station

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
NORTH BENGAL	Shahabad	Ruaner	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Hidrey	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Hibubani	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Kassaram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Arsah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Gya	Mohaniah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Aurangabad...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		tiya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nawadah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Johanabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Patna	Arwal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Bhandaganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Bherygati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Bojanli	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Patni Bara- war.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Monghyr	Patna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Dinapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Behar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Barra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Bickram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
South Singha- pore.	Hilma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Begonairai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Moukhyr	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Jamui	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Gopri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ronthal Per- gumcha,	Aheikpara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Bhagulpore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Banks	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Kolgong	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Rajmehal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
CENTRAL INDIA	Bazarihash	Gudda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Palaor	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Nya Dooaka	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Imghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
		Jantura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Johardaga...	Sakra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nanihal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pachamba (Giridi).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bazarihash...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Santagurahi...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sarghoom	Bahudi Hills	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Jhoomrab Hills	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Baras	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Chatawa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Karagduha	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Kashthoom	Bamghar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Lohardaga...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Ranchi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Palamow	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Billi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

St.	32	33	34	35	36	37	38	39	40	41	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall during the month.	Heaviest rainfall during the month.	Total rainfall from 1st January 1899 up to 31st Mar. 1899.	Average rainfall from 1st January up to 31st Mar. 1899.	Station.	District.	Metropolitan Division.
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.7	Nil	0.27	Nil	1.47	1.38	Buzar	Shahabad	South Bham.
101	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.4	Nil	0.15	Nil	1.45	1.39	Dahree		
102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.4	Nil	0.14	Nil	1.44	1.38	Hibboonh.		
103	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.7	Nil	0.30	Nil	1.49	1.38	Sansara.		
104	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	0.49	Nil	1.39	1.38	Arrah.		
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	?	?	Muhanish.		
106	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.6	Nil	0.33	Nil	0.73	1.33	Aurangabad...	Gya.	
107	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.8	Nil	0.43	Nil	1.74	1.35	Gya.		
108	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.5	Nil	0.07	Nil	1.63	1.33	Nowadab.		
109	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.2	Nil	0.35	Nil	1.24	1.47	Jhansabad.		
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	1.39	?	Arwal.		
111	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	1.14	?	Landanagar.		
112	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	0.79	?	Sherrghati.		
113	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	?	?	Rajauli.		
114	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	0.83	?	Pakri Baruan.		
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.7	Nil	0.34	Nil	0.81	1.60	Patna.	Patna.	
116	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.0	Nil	0.14	Nil	0.85	1.07	Dumapora.		
117	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.4	Nil	0.34	Nil	1.04	1.33	Bahar.		
118	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	1.3	Nil	0.31	Nil	0.95	1.24	Barhi.		
119	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Nil	?	Nil	?	Nil	0.49	?	Bikram.		
120	0.00	0.00	0.00																	

**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS  
TAKEN IN ASSAM, FOR THE MONTH OF MARCH 1888.**

The transition from the cold-weather conditions to those of the hot season in Bengal, which usually commences at the close of February, becomes complete in March. The normal features of the meteorology of March are therefore rapidly increasing temperature, gradually decreasing pressure, a general increase in the air motion, winds becoming westerly at the inland stations and south-westerly at the southern stations, while the northerly component in the wind directions almost disappears except in Behar; the air is also generally very dry, skies are clear, and there is an almost complete absence of rain, unless the normal weather conditions are disturbed by the occurrence of the local storms known as nor'-westers. These storms are believed to be brought about by the interaction of the more or less opposing wind systems which obtain to a certain extent over Bengal in this month, for at the western stations, winds are strongly westerly, at the southern stations strong moist southerly winds usually blow, while easterly winds continue to blow down the Assam Valley, and sometimes penetrate as far as Purneah and Durbhunga. From the nature of the formation of these nor'-westers and their local character, the rainfall brought by them, which is sometimes decidedly heavy, is very irregularly distributed. Occasionally also the normal conditions in March are disturbed by the formation of depressions over Northern India, which extend and travel in a south-easterly direction, and give unsettled weather and perhaps rain to Behar, Chutia Nagpur, and North Bengal, but these barometric depressions are usually less numerous and less influential in character than they are in the previous cold-weather months.

By these irregular actions a moderate amount of rain is brought to Bengal during March. The normal rainfall is heaviest in East Bengal, where it averages about 28 inches. In South-West Bengal, North Bengal, Chutia Nagpur, and Orissa the fall ranges from about one to one and a half inches, while in Behar it is rather less than half an inch.

*Meteorology of the month.*—The chief features in the meteorology of March 1888 have been—

1. A mean pressure over the whole province which has been almost absolutely normal, though the western stations in the province have shown very slight defects while the other stations show corresponding excess pressures. The mean pressure of the whole of Bengal has not varied from the normal by more than about two thousandths of an inch, while in Assam there has been a defect of about six thousandths of an inch only.
2. The average temperature of the whole province has been 0·8° in excess of the normal, the largest excess being confined to the districts Chutia Nagpur, South Behar and South-West Bengal, where it has varied from about two to one and a half degrees.
3. Humidity has been below the normal at almost all stations, the general defect being equal to about 4 per cent.
4. Cloud proportion has been also slightly smaller than usual over the greater part of the province.
5. Two slight periods of disturbance have occurred, the first accompanying the movement of a very feeble area of low pressure over Bengal, and which gave rise to local rain with storms on about the 9th and 10th, and the second period of disturbance, during which nor' westers were numerous, lasting from the 12th to the 15th, and which latter series gave even a larger amount of rain than the first, the rainfall during the second period being particularly heavy in parts of the East, South-West, and North Bengal districts.
6. Rainfall for the month has been decidedly above the normal in East and North Bengal, and in North Behar; it has been about half to two thirds the normal in Orissa and South-West Bengal, while rainfall has been almost absent in South Behar and Chutia Nagpur. In Assam decidedly heavy rain has been received during the month.

The weather conditions call for no particular comment during the early part of the month up till about the 7th, when a slight but distinct low pressure area was formed over West Bengal. On the 8th the feeble depression over Bengal was clearly marked, and in the wind directions over Northern India a general indraught was noticed towards the depression, while on the 9th there was a distinct tendency to a cyclonic circulation of winds over Bengal. The formation of this depression caused numerous showers, frequently accompanying local storms on the 8th and 9th in South-West, East, and North Bengal and Orissa, but the rainfall was heaviest in South-West Bengal. Rainfall then to a certain extent ceased, but still the barometer was low and below its normal height, and it was also irregular in its movements. There was also a tendency to a slight but distinctly marked depression in North and Central Bengal. The barometric changes of the 10th brought this into greater prominence on the 11th, and a strong inrush of southerly winds set in over South Bengal into the area of low pressure. Thunderstorms occurred on the 10th and 11th in North and East Bengal and the eastern districts of South-West Bengal, and some very heavy showers fell, more especially in the Dacca, Rungpore, and Julpigoree districts. A very rapid rise of the barometer occurred on the 12th, but it fell again rapidly on the 13th. Strong southerly

winds continued to blow on the 12th and 18th, notwithstanding the rapid barometric changes, and a second series of thunderstorms occurred on the 18th and 14th which were more general, and gave a larger amount of rain than the first series. They extended over East and North Bengal, and nearly the whole of South-West Bengal and North Behar. The rainfall during this series of storms was especially heavy in the Dacca, Furruckpore, Naddea, Jessore, Mymensingh, Julpigoree and Cooch Behar districts. The barometer continued to move irregularly but slightly for some days longer, but the southerly winds fell off in strength on the 15th and 16th, and the weather became somewhat less unsettled. Conditions then became fairly normal, with rather strong westerly winds blowing across Behar into Bengal and rather strong winds across the Bengal coast into Orissa, South and East Bengal, and with increasing pressure. A few local showers again occurred at several stations in East and North Bengal on the 27th and 28th, but the amounts of rain registered were small. At this time an unusually rapid rise of the barometer was in progress in Upper India, which caused a very rapid and considerable extension of westerly winds across Behar into Central and North Bengal, as far east as Dinagepore, Serajgunge, and Jessore, and which gave unusually low humidities to those districts for two days, but after this time the westerly winds retreated and were replaced by moist southerly winds. From this time to the end of the month there was no change of importance to record.

**Pressure.**—At the commencement of the month was slightly above the normal, but with the setting in of the disturbed conditions, the pressure oscillations became large, and in some cases the changes were as large as one and two-tenths of an inch. The average pressure of the province, however, for the first-half of the month was distinctly but only slightly above the normal, though in different districts the variations were much larger, decidedly deficient pressure being recorded in West and South-West Bengal. For the third week in the month the general pressure was again slightly in excess of the normal, but during the last week, over the greater part of the province, pressure was decidedly below the normal, the deficiency equalling 0.025 inch in South-West Bengal, 0.02 inch in North Bengal, and 0.01 inch in Orissa. The mean pressure of the province for the whole month has therefore been almost normal, and the average variation is not larger than about two thousandths of an inch. In the west of the province as represented by such stations as Calcutta, Burdwan, and Gya pressure has been distinctly below the normal, but at the eastern and northern stations pressure has been in excess, and the excess is very noticeable in the higher strata of the atmosphere, the largest excess being 0.021 inch at Darjeeling. In Assam pressure was in slight excess at Sibsaigar, while it has been in defect at Dhubri and Silchar, the defect equalling 0.018 inch at the latter station.

**Temperature.**—There has been a steady and in some districts a rather rapid rise of temperature during almost the whole of the month, the rise being most rapid in such districts as South Behar and Chutia Nagpur. Comparing the average mean temperatures of each of the large meteorological districts of the province for the week ending 2nd March with those of the week ending 30th March, it is found that in South Behar there has been a rise of 11.2° in the mean temperature in the month, in Chutia Nagpur the rise has been 10.8°, in East and North Bengal it has been between 9° and 10°, in North Behar the mean temperature has risen 8.6°, in Orissa 6.4°, and in South-West Bengal 5.1°. There has therefore been an increase in the mean temperature of the province of 8.7° during the month. Comparing the average temperatures of the whole province with the normal for the month, the actual has been in excess by 0.8°, but in Chutia Nagpur the excess is no less than 2.1°.

Some particularly high maximum temperatures were recorded towards the close of the month, the hottest day being the 25th, and on this day the maximum temperature at Midnapore was 107.3°, at Bankura 106.1° and at Ranegunge 105.8° while temperature of from 103° to 105° were recorded at Chyebassa, Burdwan, Gya, and Jessore.

The following table gives a comparative statement of the temperature variations for the four weeks of March at nine typical stations:—

Monthly variation table from the weekly comparison table during the month of March 1888.

	2ND MARCH 1888.			9TH MARCH 1888.			16TH MARCH 1888.			23RD MARCH 1888.			30TH MARCH 1888.		
	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.	Variation of actual mean maximum temperature of week from the normal mean.	Variation of actual mean minimum temperature of week from the normal mean.	Variation of actual mean daily temperature of week from the normal mean.
Calcutta	+1.3	-0.4	+0.5	+1.7	-1.6	+0.4	+1.7	+1.5	+1.0	+0.5	+2.1	+1.3	+2.0	+0.8	+1.1
Calcutta (A. H. pur.)	+1.3	-0.7	-1.2	+2.7	-2.0	-0.1	-1.7	+1.3	+0.3	+1.3	+2.1	+2.0	+1.9	+2.3	+1.9
Dacca	+1.4	-2.7	-1.1	+4.1	-0.7	+1.7	-3.8	-2.1	-4.4	-0.4	+3.7	-1.7	-0.7	+4.1	+1.7
Burdwan	+1.3	-2.6	-0.4	+3.4	+2.3	-0.1	+1.3	+1.9	+1.0	+3.9	+0.3	+2.1	+3.8	+1.7	+2.7
Bankura (Bankura)	+1.7	+0.3	+1.1	+3.3	+2.1	+2.3	+1.9	+4.0	+1.0	+1.0	+2.0	+2.0	+1.1	+1.4	+1.2
Gya	+0.9	+0.4	+0.7	+2.3	+2.3	+2.3	+0.3	+3.8	+2.0	+1.3	+3.0	+2.1	+0.3	-1.0	-0.1
Chyebassa	+0.3	+1.5	+0.3	+1.4	+2.3	+1.3	-4.9	+4.0	-0.3	-1.3	+3.3	+0.4	-0.1	-1.8	-0.7
Ranegunge	+2.1	+1.1	+1.3	+3.3	+2.9	+2.3	+3.0	+2.3	+1.3	+2.3	+2.0	+2.0	+2.0	+2.0	+1.0
Serajgunge	+2.3	+4.0	+0.1	+4.1	+4.0	+4.1	-3.9	-4.3	-2.0	-4.4	+0.9	-1.3	+2.3	+0.2	+4.0

\* Heavy rain.

**Rainfall.**—The periods of rainfall during the month have already been referred to under the general summary, and it only remains to state the amounts and the distribution. The heaviest falls have occurred in the districts of East Bengal, which have received an average amount of 3.35 inches, which is about 20 per cent. larger than the normal fall. North Bengal has received an average rainfall of 1.47 inches, which is also rather more than 20 per cent. in excess of the normal, while North Behar has received an average fall of 0.50 inch or about 30 per cent. in excess of the usual amount. In all other districts the falls have been below the normal. South-West Bengal has received an average amount of 1.01 inches or only two-thirds of the normal fall. In Orissa an average amount of 0.48 inch of rain has been recorded, which is, however, only a little over 40 per cent. of the normal fall, while in South Behar and Chutia Nagpur the falls have been small in amount that they only average a few hundredths of an inch.

Taking up the rainfall rather more in detail, in Orissa the Pooree district has been almost rainless, while the Outtack and Balasore districts have received moderate amounts of rain. In South-West Bengal the districts which have received very little rain are South-West Midnapore and South 24-Pergunnahs, and Bankoorah, while Midnapore, 24-Pergunnahs, Howrah, Hooghly, Burdwan, Beerbhoom, Moorshedabad, Jessore, and Khoolna districts have received moderate amounts, and Nuddea has received a fall in excess of the normal. In East Bengal, Noakholly, Furreedpore, Dacca, and Commillah districts have received decidedly heavy rain, considerably larger than the normal; Mymensingh has received a fall about equal to the normal, and Chittagong, Chittagong Hill Tracts, and Backergunge falls below the normal. In North Bengal, Darjeeling, Cooch Behar, Julpigoree, Rungpore, Rajshahye, and Pubna districts have received falls above the normal; Dinagepore a fall equal to the normal, and Bogra a fall decidedly below it. In North Behar the only districts which have received moderate rain are Purneah, North Bhagulpore and Durbhunga, while all the remaining districts in Behar and Chutia Nagpur, except the Sonthal Pergunnah, have received very small amounts of rain, or in the case of Patna, South Bhagulpore, Monghyr, and Chyebassa districts no rain at all.

In Assam heavy rain has been received, and at Silchar during the month no less than 8.93 inches were received; at Sibsagar 6.41 inches were also recorded, while at Dhubri the fall was smaller and only equalled 2.78 inches.

The following table gives the summary of the temperature and rainfall data of each of the seven Meteorological divisions of the Province for the month of March 1888:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 1841. May 1867.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	103.4	66.6	80.9	73.2	81.1	+0.1	0.48	1.16	-0.68	12	2.5	-1.3	46.87	56.27
South-West Bengal	107.3	83.7	94.0	69.7	81.9	+1.8	1.61	1.50	-0.46	■	2.9	-0.6	46.88	54.78
East Bengal	96.1	63.6	87.2	68.1	77.7	+0.3	3.35	2.96	+0.35	4.9	4.4	+0.5	81.34	76.40
North Bengal	101.3	51.9	89.8	63.3	76.1	-0.3	1.47	1.20	+0.27	3.1	2.3	+0.6	78.72	71.35
North Behar	99.4	52.2	89.2	63.9	76.1	+0.3	0.50	0.36	+0.13	1.0	1.3	-0.3	51.07	49.23
South Behar	103.0	54.4	83.4	63.7	79.5	+1.7	0.08	0.42	-0.34	0.6	1.5	-0.9	43.54	44.96
Chutia Nagpur	87.3	55.2	80.2	63.4	77.9	+1.1	0.05	0.05	-0.00	■	2.1	-1.9	46.55	31.66
Assam	83.3	55.4	55.5	44.0	53.7	+0.3	...	...	...	...	...	...	...	...

\* Chyebassa not included.  
[Pooree not included.]

METEOROLOGICAL OFFICE, BENGAL.  
The 10th April 1888.

ALEXANDER PEDLER,  
Off. Meteorological Reporter to the Govt. of Bengal.



**Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of March 1888.**

	Inches.	Date.	Hour.
The mean pressure of the month	29.447		
The average pressure of March from 24 years' registers	29.869		
The highest pressure in the month	30.013	1st	10h.
The lowest pressure in the month	29.635	24th	16h.
The range of pressure	0.377		
The total number of hours of bright sunshine during the month	Hours. 272.7		
The maximum possible number of hours of sunshine	371.3		
The mean temperature of the month	80.1		
The average temperature of March from 24 years' registers	80.6		
The highest temperature in the month	98.9	24th	
The lowest temperature in the month	59.1	1st	
The range of temperature during the month	39.8		
The mean daily range of temperature	21.0		
The greatest range of temperature in one day	29.8	3rd	
The mean humidity of the month	Per cent. 70		
The average humidity of March from 24 years' registers	66		
The mean vapour tension of the month	Inches. 0.702		
The average vapour tension of March from 9 years' registers	0.702		
The mean cloud proportion of the month	2.86		
The average cloud proportion of March from 11 years' registers	2.31		
The total rainfall of the month	Inches. 2.37		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	2.26		
The average fall of March from 48 years' registers	1.34		
The greatest fall in 24 hours	1.41	14th	
The number of rainy days in the month	Days. 3		
The average number of rainy days in March from 24 years' registers	4		
The mean maximum equilibrium temperature of solar radiation during the month	146.5		
The mean difference of sun and air temperatures	55.1		
The greatest sun temperature	151.9	23rd	
The greatest excess of sun over air temperature	59.6	13th	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	63.7		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	6.6		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	11.1	3rd	
The mean movement of the wind per day	Miles. 110.5		
The greatest movement of the wind in one day	224.0	13th	
The greatest movement of the wind in one hour	19.0	13th, 1 to 2 P.M.	
The number of hours with winds from each of the 8 points—			

N. 15, NE. 7, E. 13, SE. 44, S. 185, SW. 249, W. 86, NW. 50, Calm 75.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park-street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore .003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 1.0° lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0.6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

JOHN ELIOT,

METEOROLOGICAL OFFICE, INDIA;  
Calcutta, the 9th April 1888.

Off. Meteorological Reporter to the Govt. of India



## Meteorological Report of the Province of Ber

METEOROLOGICAL DIVISION.	DISTRICT.	Representative station.	STATION OBSERVATIONS.												
			AIR PRESSURE.			WIND.		TEMPERATURE.							
			Mean barometric height, ft. a.s.l.	Mean reduced to sea level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.
CENTRAL.	Pooroo	Copulpore	29.794	29.812	-0.018	SSW	3.4	8.7	1st & 6th Apl.	77.8	31st Mar. & 3rd Apl.	85.7	79.3	82.5	+2.7
		Falco Point	29.840	29.870	-0.030	SSW	3.7	8.7	5th "	76.1	3rd "	86.9	77.7	82.3	-1.3
	Cuttack	Cuttack							Observations not recorded.						
	Balasore	Balasore	29.776	29.800	-0.024	SW	21.1	39.6	3rd & 5th Apl.	73.8	1st Mar.	83.8	74.0	85.9	+1.0
SOUTH-WEST BENGAL.	South-West Midnapore	Bangor Island	29.725	29.831	-0.106	SSW	4.7	30.7	3th "	78.9	31st Mar. & 2nd Apl.	89.1	70.4	84.5	+0.6
	South 24-Pergunnas	Midnapore	29.657	29.845	-0.188	S	12.5	70.4	6th "	73.5	1st Mar.	102.0	75.4	89.3	+3.0
	24-Pergunnas														
	Howrah	Calcutta	29.908	29.830	-0.078	SSW	13.0	38.4	5th "	74.2	1st "	11.3	75.4	86.3	+0.2
SOUTH-WEST BENGAL.	Howrah														
	Burdwan	Burdwan	29.713	29.812	-0.099	SW	10.0	10.0	4th "	74.4	5th Apl.	102.4	75.3	88.9	+3.0
	Baukoora	Baukoora	29.609	-	-	NW	11.0	10.1	3rd "	70.6	3rd Mar.	104.0	74.3	89.2	-
	Berhampore	Raneegunge	29.601	29.794	-0.193	SW, NW	9.1	10.5	3rd "	70.8	3rd "	104.1	74.8	89.5	+3.3
SOUTH-WEST BENGAL.	West Burdwan														
	Moorsabadabad	Berhampore	29.732	29.819	-0.087	SSW	11.3	10.7	5th "	71.8	3rd "	100.4	74.2	87.3	+1.9
	Nadua	Krishmaghur	29.730	29.805	-	SSW	12.9	10.0	4th "	73.7	6th Apl.	101.0	75.2	89.1	-
	Jessore	Jessore	29.791	29.825	-0.034	SSW	8.3	10.7	5th "	74.1	31st Mar.	98.0	76.0	87.0	+3.0
SOUTH-WEST BENGAL.	Khoolna														
	Chittagong	Chittagong							Observations not recorded.						
	Chittagong Hill Tracts	Dumaguri													
	Backergunge	Barrisal	29.848	29.860	-0.012	S	14.5	10.3	5th & 6th Apl.	74.1	2nd Apl.	99.2	75.6	82.9	+3.0
EAST BENGAL.	Noakhally	Noakhally	29.849	29.884	-0.035	S	17.0	8.5	2nd & 3rd Apl.	71.0	2nd "	87.0	76.1	81.0	+2.2
	Farrakpore	Farrakpore	29.805	29.872	-0.067	S	17.0	8.5	4th & 6th Apl.	73.9	31st Mar.	86.0	75.4	81.0	-2.0
	Dacca	Dacca	29.925	29.817	-0.108	SSW	20.0	10.2	5th "	75.1	3rd "	102.7	76.8	84.8	+2.8
	Comilla	Comilla	29.822	29.868	-0.046	S	14.0	10.1	1st, 3rd & 4th Apl.	72.3	2nd Apl.	90.9	74.7	82.4	+2.6
EAST BENGAL.	Mymensingh	Mymensingh	29.770	29.828	-0.058	SE	15.8	10.3	5th "	69.1	31st Mar.	89.7	73.5	81.6	+1.8
	Bogra	Bogra	29.741	29.757	-	SE	12.1	10.0	5th "	71.8	6th Apl.	107.5	73.7	85.8	-
	Pabna	Srangunge	29.776	29.828	-0.052	S	14.1	10.0	5th "	71.9	6th "	95.0	73.6	84.3	+1.3
	Rajshahye	Ranmore Bazar	29.743	29.813	-0.070	SE	8.5	10.1	5th "	69.7	6th "	107.4	69.8	84.6	+1.7
NORTH BENGAL.	Maldah	Maldah	29.720	-	-	NW	10.5	10.2	4th "	67.9	6th "	98.4	69.5	84.0	-
	Dinapore	Dinapore	29.673	29.797	-0.124	SW	18.5	10.0	4th "	65.7	6th "	93.9	70.0	82.7	+1.2
	Rangpore	Rangpore	29.705	29.830	-0.125	South-Westerly	16.8	9.8	4th "	68.5	1st "	91.8	70.7	81.2	+2.1
	Jalpaiguri	Jalpaiguri	29.642	29.834	-0.192	NE & E	13.1	10.0	4th "	69.0	6th "	87.0	63.4	76.5	+1.0
NORTH BENGAL.	Cooch Behar														
	Darjeeling Hill Tracts	Darjeeling	29.728	-	-0.020	Calm	1.0	6.4	5th "	44.2	3rd Mar.	60.2	48.9	54.6	+1.7
	Purneah	Purneah	29.683	29.808	-0.125	Westerly	7.1	10.1	4th "	62.7	6th Apl.	96.5	67.6	82.0	-0.3
	North Bhagulpore														
NORTH BENGAL.	Mozufferpore	Mozufferpore													
	Darbhanga	Darbhanga	29.624	29.709	-0.085	WSW	18.0	10.4	4th "	70.8	31st Mar. & 1st Apl.	93.0	72.0	82.0	+2.2
	Chumparan	Mithlari	29.622	29.778	-0.156	ENE, W & W	22.5	10.0	4th "	63.0	6th "	90.4	65.6	81.0	+2.2
	Baran	Chupra	29.608	29.702	-0.094	W & W	13.6	9.4	3rd "	64.8	5th "	90.0	69.0	80.3	-2.1
NORTH BENGAL.	Shahabad	Dehri	29.436	29.785	-0.349	South-Westerly	24.0	10.2	2nd "	70.0	31st Mar.	108.0	76.1	88.0	+0.3
		Baran	29.671	29.811	-0.140	WSW	17.3	10.4	2nd "	65.8	6th Apl.	99.5	70.2	84.7	+1.3
		Atraah	29.607	29.802	-0.195	W	13.4	10.0	5th "	67.7	31st Mar. & 1st Apl.	100.3	69.7	85.0	+2.2
	Gya	Gya	29.627	29.809	-0.182	W	12.5	10.5	1st "	64.7	1st "	101.6	68.7	83.1	-1.1
SOUTH BENGAL.	Patna	Bhagulpore	29.626	29.809	-0.183	W	13.0	10.5	4th "	64.9	3rd "	99.4	70.0	85.0	+0.9
	South Bhagulpore	Bhagulpore	29.649	29.810	-0.161	W	13.0	10.4	1st & 3rd to 5th Apl.	68.0	1st "	97.6	71.9	84.6	+1.7
	Monrovia														
	South 24-Pergunnas	Dootika	29.623	-	-0.020	W	10.5	10.5	4th "	69.0	31st Mar.	101.0	73.0	87.0	+2.7
SOUTH BENGAL.	Hazratnagar	Hazratnagar	29.631	29.700	-0.069	NW	10.5	10.0	3rd, 3rd Apl.	68.0	6th Apl.	87.3	75.0	86.0	+2.4
	Kacharua	Manchao	29.720	29.780	-0.060	Westerly	15.5	10.2	3rd "	65.4	31st Mar.	97.5	69.7	83.6	-2.3
	Manikganj														
	Shahabpur	Shahabpur	29.680	-	-0.060	SSW	4.5	10.0	3rd "	67.7	31st "	104.3	73.0	89.0	+2.0

Explanation.—*Summary*.—The normal means of air pressure and temperature are the arithmetical average of means of the readings during the season, 1900. The humidity of the atmosphere is expressed as percentage, saturated air being represented by 100. A clear sky is denoted by 0, and an overcast sky by 100. The numerical means of the rainfall in that district determined from the observations at the sub-divisional stations, and the mean of the mean in the district, and the number of stations. A rainy day is one on which at least one inch of rain falls.

for the week ending Friday, the 6th of April 1888.

				DISTRICT OBSERVATIONS.													
				RAINFALL.													
				Since 1st of March.			Since 15th May 1887.										
				Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	Average number of rainy days.	Normal number of rainy days.	Representative station.	District.				
81	0	—	—	Nil	0.14	0.08	0.08	—0.00	46.52	58.33	—11.80	0.0	0.4	Pooroo ...	ORISSA.		
78	1.0	—	—	—	—	—	—	—	—	—	—	—	—	Gopalpur ...			
				0.05	0.16	0.70	1.54	—0.03	48.00	54.74	—0.05	0.2	0.4	Cuttack ...			
	1.00	0.33	0.25	0.25	0.88	1.54	1.54	—0.00	40.98	56.00	—10.22	1.0	0.5	Balasore ...	SOUTH-WEST MIDNAPORE.		
79	4.6	—	—	Nil	0.09	0.32	1.45	—1.13	62.92	65.44	—2.52	0.0	0.3	Saugor Island ...			
84	0.4	—	—	Nil	0.13	0.70	2.10	—1.50	53.68	54.30	—0.62	0.0	0.4	Midnapore ...			
	1.0	—	—	Nil	0.29	1.07	1.81	—0.74	41.28	55.35	—11.87	0.0	0.6	Calcutta ...	SOUTH 24 PARGANNAS.		
														Howrah ...			
														Hoschly ...			
85	0.7	0.08	0.06	0.06	0.27	0.78	1.74	—0.86	49.06	49.40	—1.43	0.7	0.6	Burdwan ...	SOUTH 24 PARGANNAS.		
86	0	0.12	0.05	0.05	0.06	0.26	1.30	—1.10	51.65	54.31	—2.66	0.8	0.2	Bankura ...			
82	0	NR	NR	NR	0.18	0.35	0.78	—0.43	40.00	54.33	—5.14	0.0	0.4	Raipur ...			
47	1.4	—	—	Nil	0.10	0.48	1.12	—0.64	60.30	51.73	+8.87	0.0	0.4	Berhampur ...	SOUTH 24 PARGANNAS.		
61	0.0	—	—	0.06	0.10	2.20	2.11	+0.00	46.05	52.63	—5.08	0.2	0.7	Krishnachur ...			
83	1.5	—	—	NR	0.37	1.80	2.57	—1.08	45.31	57.59	—12.28	0.0	0.6	Jessore ...			
				NR	0.17	1.37	2.01	—0.64	102.44	117.30	—14.95	0.0	0.5	Chittagong ...	SOUTH 24 PARGANNAS.		
				NR	0.01	1.81	3.37	—1.56	60.06	80.54	—19.68	0.0	0.8	Dumuria ...			
76	0.0	—	—	NR	0.04	1.02	2.11	—0.70	61.02	51.75	—17.73	0.0	0.6	Barisal ...			
75	0.4	—	—	NR	0.18	3.71	4.15	—0.41	78.53	116.00	—36.47	0.0	0.8	Naokholla ...	SOUTH 24 PARGANNAS.		
70	1.4	—	—	NR	0.40	6.01	3.00	+1.00	51.73	60.02	—18.89	0.0	0.7	Farrukpore ...			
72	4.3	—	—	NR	0.47	6.07	3.30	+1.57	47.30	63.03	—15.12	0.0	0.8	Dacca ...			
63	3.4	—	—	0.54	0.54	6.22	4.15	+1.82	50.12	70.03	—20.21	0.0	0.9	Comilla ...	SOUTH 24 PARGANNAS.		
73	0.3	0.77	0.20	0.41	2.40	2.51	—0.09	63.97	71.16	—7.19	0.4	0.7	Mymensingh ...				
65	1.0	—	—	NR	0.11	0.50	1.25	—0.06	61.55	59.29	+2.26	0.0	0.6	Bohga ...			
61	3.4	—	—	NR	0.46	1.88	1.02	+0.01	47.80	50.34	—0.03	0.0	0.7	Serajpore ...	SOUTH 24 PARGANNAS.		
48	0	NR	NR	NR	0.31	1.20	1.18	+0.02	51.00	50.19	+0.29	0.0	0.3	Raipur ...			
49	0.0	NR	NR	NR	0.10	0.17	0.78	—0.66	47.02	56.41	—9.19	0.0	0.4	Mulda ...			
38	1.7	—	—	NR	0.07	0.00	0.73	—0.06	70.08	67.27	+12.71	0.0	0.3	Dumuria ...	SOUTH 24 PARGANNAS.		
10	0.4	NR	NR	NR	0.35	2.43	1.74	+0.00	83.40	78.04	+7.35	0.0	0.6	Raipur ...			
02	4.0	NR	NR	NR	0.61	2.01	2.15	+0.24	120.72	119.20	+7.33	0.8	0.0	Jalpaiguri ...			
81	4.0	NR	NR	NR	0.01	0.00	2.03	+0.36	121.73	124.42	—2.69	0.2	1.0	Darjeeling ...	SOUTH 24 PARGANNAS.		
82	0	NR	NR	NR	0.11	1.37	0.66	+0.42	66.33	59.13	+7.20	0.0	0.4	Purnea ...			
				NR	0.00	0.22	0.55	—0.33	47.57	44.20	+5.28	0.0	0.3	North Bhatgaon ...			
88	0	NR	NR	NR	0.08	0.63	0.30	+0.20	50.50	48.11	+5.45	0.0	0.2	Muzaffarpore ...	SOUTH 24 PARGANNAS.		
31	1.0	NR	NR	NR	0.08	0.15	0.15	—0.50	40.07	47.51	+3.56	0.0	0.3	Burhanpur ...			
86	0	NR	NR	NR	0.02	0.13	0.20	—0.17	40.37	43.51	—3.57	0.0	0.2	Mothur ...			
18	0.3	NR	NR	NR	0.06	0.04	0.13	—0.38	33.07	41.21	—2.54	0.0	0.2	Chupra ...	SOUTH 24 PARGANNAS.		
24	0	Dropa	NR	NR	0.06	0.04	0.13	—0.38	33.07	41.21	—2.54	0.0	0.2	Baer ...			
25	0	—	—	NR	0.05	0.04	0.15	—0.31	30.14	43.61	—3.27	0.0	0.2	Patna ...			
83	0	—	—	NR	0.04	NR	0.33	—0.35	36.91	42.57	—5.26	0.0	0.2	Bankura ...	SOUTH 24 PARGANNAS.		
				NR	0.06	NR	0.45	—0.40	43.00	44.16	—0.50	0.0	0.2	Bankura ...			
				NR	0.08	0.25	0.21	—0.30	53.41	51.08	+1.73	0.0	0.3	Monastir ...			
87	0	—	—	NR	0.08	0.25	0.21	—0.30	53.41	51.08	+1.73	0.0	0.3	South Bhatgaon ...	SOUTH 24 PARGANNAS.		
11	1.2	—	—	NR	0.08	0.40	0.97	—0.04	48.07	52.13	—4.06	0.0	0.2	Hazratnagar ...			
				NR	0.08	0.16	0.73	—0.75	46.56	48.25	—2.40	0.0	0.3	Ranchi ...			
				NR	0.08	0.16	0.73	—0.75	46.56	48.25	—2.40	0.0	0.3	Lokhand ...	SOUTH 24 PARGANNAS.		
				NR	0.08	0.16	0.73	—0.75	46.56	48.25	—2.40	0.0	0.3	Manikpur ...			
89	0	0.07	0.08	0.20	0.00	2.97	—1.20	53.11	52.81	—0.57	1.0	0.0	Chyabasa ...	CHOTA NAGPUR.			

The observations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater. Under the head District observations of rainfall the normal means are the means of the district, and the observed means are the means of the rainfall received in the district, i.e., from total rainfall at the sub-divisional stations.

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 6th of April 1898.

Meteorological division.	District.	Station.	RAINFALL.						TOTAL.		Total rain-fall since 1st of March.	Average total rain-fall from 1st of March.	Total rain-fall since 1st May 1887.	Average rain-fall from May to date.
			Saturday, 31st March.	Sunday, 1st April.	Monday, 2nd April.	Tuesday, 3rd April.	Wednesday, 4th April.	Thursday, 5th April.	Friday, 6th April.	Number of rainy days.				
OZMA.	Poonce	Poonce	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.65	59.55	59.55
		Khurda	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.65	59.55	59.55
		Baspar	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.85	70.08	68.66
		Fabo Point	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	30.32	?
		Gop	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	?	?
	Cuttack	Jagatsinghpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.93	33.04	40.11
		Hanki	0.00	0.00	0.00	0.32	0.03	0.00	0	0.35	0.35	1.81	43.05	45.11
		Cuttack	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	2.13	63.45	68.07
		Kondrapara	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.92	63.70	64.03
		Jajpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.52	56.99	55.01
	Balasore	Dhamra	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	43.00	?
		Saltpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	61.71	?
		Chandbali	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.33	43.00	54.61
		Bhuddrak	0.00	0.00	0.00	0.00	0.49	0.00	1	0.49	0.49	1.06	48.99	55.01
		Rorah	0.00	0.00	0.00	0.00	0.10	0.00	2	0.48	1.30	1.81	42.50	55.17
SOUTH-WEST BRANCH.	Midnapore	Halasore	0.00	0.00	0.00	0.12	0.32	0.00	2	0.13	1.34	1.71	60.18	61.00
		Jellapore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.10	40.05	55.10
		Raripodah	0.00	0.00	0.00	0.00	0.00	0.00	1	0.06	0.37	1.58	40.13	57.28
		Contai	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.18	51.03	64.43
		Saugor Island	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.37	74.18	66.36
	24-Pergunnahs	Tumruk	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	2.00	63.53	64.23
		Midnapore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.40	39.12	61.03
		(Ghat)	0.00	0.00	0.00	0.00	0.00	0.00	1	0.00	1.00	3.70	54.25	67.07
		Kukrabaty	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	58.12	?
		Heria	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	45.43	?
	Howrah	Rangapure	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	?	45.01	?
		Garbeta	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.46	?	51.01	?
		Diamond Har- bour	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.50	41.03	61.05
		Canning Town	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.51	?	51.32	?
		Ajporo Jail	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	2.05	1.06	67.20	69.15
Hooghly	Mazgaon	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.54	2.08	41.01	68.16	
	Dam-Dum	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.39	1.00	43.02	55.99	
	Barrack	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.47	1.77	43.43	52.46	
	Bunderhat	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.05	2.37	64.20	68.04	
	Howrah	Howrah	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.10	1.92	40.94	54.95
Burdwan	Moharaka (Colobaria.)	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.71	1.29	41.74	55.70	
	Burampore	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01	0.58	1.74	57.30	64.00	
	Hooghly	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	1.32	42.57	61.37	
	Johanabad	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.37	1.32	41.73	61.73	
	Culina	0.00	0.00	0.00	0.00	0.00	0.00	1	0.06	1.10	1.63	40.37	47.37	
Bankura	Burdwan	0.00	0.00	0.00	0.00	0.00	0.00	1	0.08	0.16	1.01	47.44	50.77	
	Culina	0.00	0.00	0.00	0.00	0.00	0.00	1	0.08	0.16	1.01	47.44	50.77	
	Burampore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Khatra	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Judna	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
Beerbhoom	Kotalpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Auda	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Gangajalghati	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Kaspore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Sonamukhi	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
Nedden	Bh. Soory	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.25	0.70	51.88	58.05	
	Hokampore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Kampore Hall	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Kolpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Ranaghat	0.00	0.00	0.00	0.00	0.00	0.00	1	0.28	1.77	1.50	55.82	60.47	
Kheolna	Kishmaghur	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.73	1.21	44.58	44.51	
	Choudanga	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.94	2.23	46.88	48.61	
	Meherpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	2.38	2.53	51.73	61.05	
	Koomita	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	3.50	2.59	68.55	69.10	
	Satkhis	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
Jessore	Bagichat	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	0.00	
	Kheolna	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	3.21	3.40	48.21	50.15	
	Namit	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	2.00	1.29	50.78	60.08	
	Jessore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.50	2.40	44.71	58.10	
	Jhuidah	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	3.01	2.90	47.03	59.28	
Moorshedabad	Mugoorah	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	3.15	3.37	53.59	64.45	
	Bongong	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.92	3.68	58.58	64.15	
	Kandi	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.25	1.27	48.07	58.10	
	Behulpore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.20	1.18	57.91	61.11	
	Lalbuch	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.35	1.02	70.29	64.77	
Chittagong	Azimkunge	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.70	1.43	61.10	61.05	
	Jumkore	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.33	0.93	61.47	49.70	
	Lukola	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.17	1.13	52.79	58.21	
	Atitong	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.01	?	54.46	?	
	Patakur	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.70	?	?	?	
East Bengal	Chittagong	Cox's Bazar	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.17	1.00	13.72	13.00
	Chittagong	Chittagong	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.68	1.20	40.12	40.12
	Kutubdia	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.03	?	70.43	?	
	Satadanga	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.10	?	60.11	?	
	Rangmati	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	3.47	3.20	60.01	60.01	
Backergunge	Runa	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.18	3.17	60.71	60.71	
	Patakur	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.07	1.75	47.73	51.00	
	Parozupura	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	3.14	1.72	60.00	60.00	
	Burisal	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.10	0.46	51.00	51.00	
	Bhola	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	1.06	0.00	50.00	50.00	

## Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 6th of April 1888—contd.

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of March.	Average total rain-fall from 1st of March.	Total rain-fall since 1st of May 1887.	Average rainfall from 1st of May to date.
			Saturday, 1st March.	Sunday, 2nd April.	Monday, 3rd April.	Tuesday, 4th April.	Wednesday, 5th April.	Thursday, 6th April.	Friday, 7th April.	Number of rainy days.	Ratio of week.				
EAST BENGAL—contd.	Noakhally ..	Gournadi ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Bouphat ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Noakhally ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Farmy ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Faridpur ..	Harishpur ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Romganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Madatipore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Dacca ..	Munshiganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Dacca ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Narainiganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Munshiganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Hill Tipperah.	Agartala ..	0.00	1.10	0.00	0.00	0.00	0.00	0.00	1	1.10	0.00	0.00	0.00	?
Comilla ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Chandpur ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Mahmudpur ..		0.00	1.07	0.00	0.00	0.00	0.00	0.00	1	1.07	0.00	0.00	0.00	?	
Ramchandrapore ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Asirabad ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Daudkandi ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Kasba ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Lakshmi ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Mymensingh ..		Kishoreganj ..	0.00	0.42	0.00	0.00	0.00	0.00	0.00	1	0.42	0.00	0.00	0.00	?
		Atin (Tangail) ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Mymensingh ..	0.00	0.75	0.00	0.00	0.00	0.00	0.00	1	0.75	0.00	0.00	0.00	?
	Jamalganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Mymensingh ..	Netrakona ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Subarnachal ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Durgapore ..	0.00	1.20	0.00	0.00	0.00	0.00	0.00	1	1.20	0.00	0.00	0.00	?	
	Dewanganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
NORTH BENGAL.	Pabna ..	Pabna ..	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
		Berhampore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Bogra ..	Sherpore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Nowkhilla ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Bogra ..	Bogra ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Panabibi ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Rajshahi ..	Banulab ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Natore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Nazimabad ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Lalpur ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Malda ..	Malda ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Chanchal ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
Gajol ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Singur ..		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Dinapore ..	Mohadepore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Cauramon ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Raigunge ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Dinapore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Banga ..	Balorhat ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Bhowanigunge ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Gyandak ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Banga ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Banga ..	Kurigram ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Banga ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Banga ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Banga ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Jalpigore ..	Jalpigore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Alipore Doo ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Falazotte ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Dubiganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Cooch Behar ..	Dubiganj ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Cooch Behar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Mukhtigunge ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Maldah ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Darjeeling Hill.	Buxa ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Shilliguri ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Darjeeling ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Kalimpong ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
NORTH BENGAL.	Purneah ..	Kharagpura ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Arrah ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Purneah ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Gumtara ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	North Bhaagpore.	Bahar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Katipara ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Madhupore ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Barpeta ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
	Darrang ..	Talpara ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Dorbhaga ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Madhupura ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
		Bahar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?
Moulvibazar ..	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
Moulvibazar ..	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	Moulvibazar ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	?	
	M														
M															

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 6th of April 1888—*contd.*

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of March.	Average total rain-fall from 1st of March.	Total rain-fall since 15th May 1887.	Average rainfall from 15th May to date.
			Saturday March.	Sunday April.	Monday April.	Tuesday April.	Wednesday April.	Thursday April.	Friday April.	Number of rainy days.	of Rainfall week.				
NORTH BENGAL— <i>concluded</i>	Sargol	Gopalganj	...	...	...	...	...	...	...	...	...	0.07	0.14	42.08	43.90
		Bewar	...	...	...	...	...	...	...	...	...	0.07	0.14	39.74	45.14
SOUTH BENGAL	Shahabad	Chunar	...	...	...	...	...	...	...	...	...	0.18	0.35	38.79	41.45
		Buxar	...	...	...	...	...	...	...	...	...	0.13	0.26	39.73	39.58
		Bhagalpur	...	...	...	...	...	...	...	...	...	0.06	0.12	41.83	41.34
		Rohatki	...	...	...	...	...	...	...	...	...	0.14	0.28	38.58	41.68
		Madhupur	...	...	...	...	...	...	...	...	...	0.10	0.20	41.34	41.07
		Araria	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mohania	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gya	Aurangabad	...	...	...	...	...	...	...	...	...	...	0.15	29.06	43.94
		Gya	...	...	...	...	...	...	...	...	...	0.04	0.08	43.42	40.41
		Nowabad	...	...	...	...	...	...	...	...	...	0.07	0.14	39.01	41.34
		Shahabad	...	...	...	...	...	...	...	...	...	...	0.11	40.77	41.46
		Arwal	...	...	...	...	...	...	...	...	...	...	...	41.15	...
		Bandanagar	...	...	...	...	...	...	...	...	...	...	...	29.01	...
		Sherrpohat	...	...	...	...	...	...	...	...	...	...	...	36.45	...
	Patna	Rajauli	...	...	...	...	...	...	...	...	...	...	...	22.21	...
		Patna	...	...	...	...	...	...	...	...	...	0.07	0.14	37.17	43.18
		Chhapra	...	...	...	...	...	...	...	...	...	0.25	0.50	38.46	42.16
CHITTA NAGPUR.	Monghyr	Begowai	...	...	...	...	...	...	...	...	...	0.02	0.04	49.68	40.41
		Monghyr	...	...	...	...	...	...	...	...	...	0.02	0.04	47.26	47.40
		Jamui	...	...	...	...	...	...	...	...	...	...	...	40.02	40.28
		Gopri	...	...	...	...	...	...	...	...	...	...	...	42.53	...
		Shankarpur	...	...	...	...	...	...	...	...	...	...	...	28.28	...
	South Binsul-pore	Binsul-pore	...	...	...	...	...	...	...	...	...	0.42	0.84	41.31	41.34
		Binsul	...	...	...	...	...	...	...	...	...	0.11	0.22	39.01	43.05
		Kolpur	...	...	...	...	...	...	...	...	...	...	...	43.45	...
	Sonthal Per-gumunda	Kajmunda	...	...	...	...	...	...	...	...	...	0.51	1.02	57.89	52.51
		Udum	...	...	...	...	...	...	...	...	...	0.47	0.94	49.54	43.45
		Pasur	...	...	...	...	...	...	...	...	...	0.36	0.72	54.83	54.37
		Dya Bhumia	...	...	...	...	...	...	...	...	...	0.53	1.06	40.94	45.43
		Daghar	...	...	...	...	...	...	...	...	...	0.65	1.30	47.36	51.58
		Jamtara	...	...	...	...	...	...	...	...	...	0.10	0.20	50.24	50.95
		Siwra	...	...	...	...	...	...	...	...	...	...	...	38.51	...
	Hazratnagar	Prothama	...	...	...	...	...	...	...	...	...	0.70	1.40	42.30	46.30
		(Giridih)	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hazratnagar	...	...	...	...	...	...	...	...	...	0.07	0.14	47.34	49.76
		Santipur	...	...	...	...	...	...	...	...	...	0.08	0.16	41.27	48.03
		Santipur	...	...	...	...	...	...	...	...	...	...	...	40.51	40.51
		Jhoomtali Hills	...	...	...	...	...	...	...	...	...	1.02	2.04	53.60	64.06
		Barna	...	...	...	...	...	...	...	...	...	...	...	38.70	...
	Lohardugga	Chitra	...	...	...	...	...	...	...	...	...	0.13	0.26	40.10	...
		Karagaha	...	...	...	...	...	...	...	...	...	...	...	72.30	...
		Kamptul	...	...	...	...	...	...	...	...	...	...	...	51.54	...
	Simgur	Lohardugga	...	...	...	...	...	...	...	...	...	0.42	0.84	57.69	54.20
		Manch	...	...	...	...	...	...	...	...	...	...	...	54.38	54.28
		Paimow	...	...	...	...	...	...	...	...	...	...	...	...	...
		Simgur	...	...	...	...	...	...	...	...	...	...	...	...	...
		Balumar	...	...	...	...	...	...	...	...	...	0.00	...	35.30	...
	Simgur	Hazratnagar	...	...	...	...	...	...	...	...	...	...	...	54.85	...
		Gurwah	...	...	...	...	...	...	...	...	...	...	...	...	...
	Simgur	Chaurama	...	...	...	...	...	...	...	...	...	0.08	0.16	53.11	53.78
		Chakrahar-pura	...	...	...	...	...	...	...	...	...	0.13	0.26	41.40	...
		Ghantila	...	...	...	...	...	...	...	...	...	0.15	0.30	35.91	...
	Mankhool	Banarapur	...	...	...	...	...	...	...	...	...	...	...	41.16	...
		Purub	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gobindpur	...	...	...	...	...	...	...	...	...	0.36	0.72	46.65	41.25
		Raghuwath-pura	...	...	...	...	...	...	...	...	...	...	...	38.70	...
		Barrabhoon	...	...	...	...	...	...	...	...	...	...	...	43.31	...

Explanation.—Indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 10th April 1888.

# SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 6th APRIL 1888.

The meteorological conditions and changes in Bengal during the past week call for little or no comment. Over the greater part of the Province weather has been of the normal hot weather character; dry westerly and south-westerly winds have generally obtained, temperature has been very high, while pressure has oscillated in the usual manner, and there has, at the great majority of stations, been a complete absence of rain, though, in a few instances, owing to slightly disturbed conditions, local storms occurred on one or two days. On the 31st March and 1st April a few small storms gave rain to some of the stations in North Bengal, close to the hills, and to the Mymensingh and Tipperah districts in East Bengal. These were probably connected with disturbed conditions over Assam and Cachar, for a slight barometric depression was reported over this area, which gave rise to moderate rain. Again, on the 3rd and 4th, a few showers were reported in Orissa and at some stations in South-West Bengal and Chutia Nagpur, but the amounts were generally small. These latter unsettled conditions were apparently connected with a rather rapid fall of pressure which took place over South Bengal at this time. With these exceptions, fine settled weather has obtained throughout the week.

**Pressure.**—A rather rapid fall of pressure took place on 31st March, on which day slightly disturbed conditions existed over East and North Bengal. On the 1st April, however, an almost equal rise of pressure took place, but this was followed by a fall which lasted for three days, and on the 4th instant the fall was decidedly rapid. Disturbed conditions again set in with the falling pressure, but on the 5th and 6th pressure rose steadily and again weather became settled. During the greater part of the week, therefore, pressure has been falling, and the average pressure for the period has been decidedly below the normal, the mean for the whole week for the Province being 0.015 inch in defect. The defect has been fairly equally distributed over the whole Province.

**Temperature.**—Has again been very high almost throughout the week, and maximum temperatures in excess of 100° have been reported on one or more days at no less than 21 out of the 39 reporting stations in the plains. The following very high maximum temperatures have been registered:—

At Chyebassa, on the 3rd April	...	...	107.9°
„ Raneegunge „ 3rd „	...	...	106.5°
„ Bankoorah „ 3rd „	...	...	106.1°
„ Midnapore „ 6th „	...	...	105.4°
„ Dehree „ 2nd „	...	...	105.2°
„ Burdwan „ 4th „	...	...	104.6°

The mean temperature for the week has consequently been above the normal in all districts, and the general temperature for the whole Province shows an excess of no less than two degrees, while in Chutia Nagpur the excess equals the large amount of 3.3°.

The actual temperatures recorded and their variation from the normal are clearly seen in the following table where the temperature data at eight typical stations in the Province are given:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 6th April 1888.

	Normal mean maximum temperature for the week ending 6th April.	Actual mean maximum temperature for the week ending 6th April 1888.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 6th April.	Actual mean minimum temperature for the week ending 6th April 1888.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 6th April.	Actual mean daily temperature for the week ending 6th April 1888.	Variation of actual mean from the normal.
Calcutta	95.1	94.3	-0.8	74.0	76.4	+2.4	84.6	84.8	+0.2
Dacca	92.5	92.7	+0.2	73.0	76.8	+3.8	82.8	81.5	-1.3
Burdwan	98.4	102.3	+3.9	73.4	75.3	+1.9	85.0	88.9	+3.9
Patna	98.1	99.4	+1.3	70.2	70.3	+0.1	81.1	85.0	+3.9
Gya	100.0	101.5	+1.5	72.3	68.7	-3.6	86.2	85.7	-0.5
Purneah	96.5	96.5	0	68.0	67.5	-0.5	82.0	85.0	+3.0
Hazribagh	94.4	97.9	+3.5	68.6	72.0	+3.4	81.5	84.0	+2.5
Darjeeling	60.5	60.3	-0.2	40.2	48.2	+8.0	53.2	51.0	-2.2

**Rainfall.**—The only meteorological divisions which have received an average rainfall exceeding a tenth of an inch are Orissa and East Bengal. South-West and North Bengal and Chutia Nagpur have received very small falls, but so small as to be of little importance; while Behar has been practically, if not absolutely, rainless. The largest rainfall has been received in the Comillah district, the stations in which average rather more than half an inch, while in the Balasore, Julpigoree, and Oooch Behar districts the falls average from a quarter to half an inch rain.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 6th of April 1888 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of March.		Since 15th May 1897.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	99°5	78°8	80°8	77°3	83°4	+0°0	0°12	0°10	-0°07	0°5	0°5	0	0°00	1°32	47°01	50°43
South-West Bengal	104°5	70°6	80°6	75°7	87°7	+2°2	0°02	0°24	-0°22	0°2	0°6	-0°4	1°02	1°71	48°80	56°97
East Bengal	95°2	60°1	80°6	76°3	82°5	+1°6	0°13	0°40	-0°27	0°2	0°8	-0°6	3°46	3°15	61°40	78°77
North Bengal	102°0	50°9	84°7	76°6	82°6	+1°8	0°07	0°29	-0°22	0°2	0°6	-0°4	1°47	1°47	75°72	73°22
North Behar	101°3	58°0	84°4	68°7	81°5	+0°5	Nil	0°07	-0°07	0°0	0°3	-0°3	0°50	0°44	58°07	60°40
South Behar	105°2	64°7	100°3	71°4	85°8	+2°2	Nil	0°05	-0°05	0°0	0°2	-0°2	0°08	0°45	62°85	44°01
Chhota Nagpur	101°2	68°4	97°0	70°0	84°4	+3°3	0°01	0°04	-0°03	0°1	0°3	-0°2	0°06	0°09	46°59	51°13

\* Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL ;

The 10th April 1888.

A. PEDLER,

Offg. Meteorological Reporter to the Govt. of Bengal.

## Results of the Meteorological Observations taken at the Alipore Observatory from 1st to 7th April 1888.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.	
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.			
1888.		°		Inches	°	°	°	°	°	Inches	°	%			Inches		
April	1st	146.8	8.4	29.811	83.0	89.4	14.2	75.2	77.6	0.878	75.3	79	SSW and S	...	130	Nil	Chiefly clear, P.
"	2nd	148.6	9.8	769	83.4	94.4	19.5	74.9	77.8	.880	75.4	78	SSW and S	...	170	"	Clear, P.
"	3rd	152.2	5.4	731	85.7	94.7	17.0	77.7	79.1	.914	76.5	77	SSW	...	106	"	Chiefly cloudy, P.
"	4th	151.2	8.8	683	86.2	98.4	22.6	75.8	76.9	.801	72.5	66	WSW and SSW	...	114	"	Clear, P.
"	5th	150.5	9.4	701	85.9	97.6	22.4	75.2	76.3	782	71.8	67	SSW and W	...	76	"	Clear, P.
"	6th	148.4	9.0	723	85.4	96.5	21.2	75.3	78.3	.873	75.1	74	SW by W, and SSW.	...	121	"	Chiefly clear, P.
"	7th	147.4	8.6	655	84.2	93.5	16.2	77.3	78.2	.878	75.3	74	SW, SSW and S	...	185	"	Chiefly cloudy, P.

The mean pressure of the seven days	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, S. G.'s Office	...	...	...	29.725
The total number of hours of bright sunshine	...	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	...	59.4
The mean temperature of the seven days	...	...	...	°
The average temperature of the corresponding period for 24 years, S. G.'s Office	...	...	...	84.8
The extreme variation of temperature	...	...	...	23.5
The maximum temperature	...	...	...	98.4
The highest velocity of the wind in one hour	...	...	...	Miles.
The highest pressure of wind on one square foot	...	...	...	lbs.
The mean relative humidity	...	...	...	%
The average relative humidity of the corresponding period for 24 years, S. G.'s Office	...	...	...	71
The total fall of rain from 1st to 7th April 1888	...	...	...	Inches.
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	Nil
The total fall from 1st January to 7th April 1888	...	...	...	0.39
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	4.89
	...	...	...	3.16

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 0h., 10h., 16h. and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 86, formerly in the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The direction and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

0. overcast, ∆. dew.

JOHN ELIOT,

Offg. Meteorological Reporter to the Govt. of India.

Meteorological Office, GOVT. OF INDIA;

Calcutta, the 9th April 1888.



**Abstract of the Results of the Thermometric Observations taken at the Meteorological Office, Chowringhee, in the month of March 1888.**

The mean temperature during the month	...	...	81.0	Date,
The highest temperature during the month	...	...	101.2	24th.
The lowest temperature during the month	...	...	58.9	1st.
The range of temperature during the month	...	...	42.3	
The mean daily range of temperature during the month	...	...	23.1	
The greatest range of temperature in one day during the month	...	...	32.3	3rd.
				%
The mean humidity during the month	...	...	67	
				Inches.
The mean vapour tension during the month	...	...	7.12	
The total rainfall of the month	...	...	1.13	
The greatest fall in 24 hours	...	...	0.52	15th.
				Days.
The number of rainy days in the month	...	...	3	

JOHN ELIOT,

*Offg. Meteorological Reporter to the Govt. of India.*

METEOROLOGICAL OFFICE, INDIA;

*The 9th April 1888.*

**Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 1st to 7th April 1888.**

W. N. E.	Date.	TEMPERATURE.				Mean wet bulb.	HYGROMETRI.			Fallo.
		Mean.	Maximum.	Range.	Minimum.		Vapour tension.	Dew point.	Humidity.	
1888.		°	°	°	°	°	Inches.	°	%	Inches.
April	1st	82.3	92.0	17.0	75.0	78.1	.906	76.3	82	Nil.
"	2nd	83.6	95.8	21.0	74.8	78.6	.912	76.5	76	"
"	3rd	85.3	97.2	19.6	77.6	79.1	.911	76.4	75	"
"	4th	86.1	100.3	25.4	75.0	76.0	.768	70.9	60	"
"	5th	86.1	100.0	24.4	75.6	75.4	.737	70.1	59	"
"	6th	85.6	98.8	23.0	75.8	77.1	.818	73.2	66	"
"	7th	84.8	95.8	18.6	77.3	80.2	.671	76.3	81	"

The mean temperature of the seven days ... 84.9

The extreme variation of temperature ... 25.6

The maximum temperature ... 100.4

The mean relative humidity ... 72

The total fall of rain from 1st to 7th April 1888 ... Nil.

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

*The 9th April 1888.*

JOHN ELIOT,

*Offg. Meteorological Reporter to the Govt. of India*

## MEMORANDUM.

From the annexed table exhibiting the mortuary statistics of the districts in Bengal (excluding Hariharganj outpost in Lohardugga, from which no return has yet been received) for the month of January 1888, it appears—

1. That the deaths of 138,749 persons were registered among a population of 66,163,884, or at the rate of 25.08 per 1,000 per annum, against 26.28 per 1,000 in the preceding month, and 26.88 per 1,000 in the corresponding month of the past year, indicating, as compared with both the periods, a retrogression in the number of deaths recorded.

2. That the undermentioned districts furnished the highest proportions of deaths :—

Districts.	Ratio per mille.	Districts.	Ratio per mille.
Dinajpur	42.72	Nuddea	31.80
Rajshahye	41.88	Hughli	30.72
Maldah	39.96	Howrah	29.88
Julpiguri	39.84	Balasore	29.40
Bogra	38.28	Burdwan	29.28
Rungpore	36.52	Pabna	29.16
Khulna	35.16	Noakhali	28.32
24-Pergunnahs	34.32	Monghyr	27.96
Puri	33.72	Darjiling	27.72
Birbhum	33.36	Midnapore	26.76
Purneah	33.24	Murshidabad	26.76
Backerganj	32.52	Jessore	26.16
Mymensing	32.40		

3. That the mortality from the specific diseases mentioned in the appended table is shown below. The figures indicate that cholera prevailed with considerably less fatality during the month under notice as compared with the corresponding month of the preceding year, and that the fatal results from the rest of the diseases exhibited only fractional variations, excepting injury, which maintained the same death-rate :—

	Ratio per mille during—	
	January 1888.	January 1887.
Cholera	8.4	3.00
Small-pox	0.8	0.4
Fever	19.08	18.96
Bowel-complaints	8.4	9.6
Injury	12	12
Other causes	3.96	3.60

4. That the following districts returned conspicuously high mortality from cholera and fever, and that no districts exhibited any noticeable high death-rate from the other diseases mentioned in the foregoing table, excepting in Puri, where 20.88 per 1,000 of the population died from the diseases coming under the head of "Other causes" :—

Cholera.		Fever.	
	Ratio per mille.		Ratio per mille.
24-Pergunnahs	5.12	Dinajpur	40.44
Mymensing	5.16	Rajshahye	39.84
Howrah	3.36	Maldah	38.28
Midnapore	2.76	Julpiguri	37.56
Balasore	2.40	Rungpore	33.84
Chittagong	2.28	Bogra	33.36
Puri	2.16	Purneah	32.40
		Khulna	28.44
		Pabna	27.48
		Nuddea	27.36
		Birbhum	26.64
		Murshidabad	24.12
		Burdwan	24.00
		Mymensing	22.92
		Hughli	22.80
		Noakhali	22.80
		Jessore	22.44
		Monghyr	22.44
		Darjiling	21.72
		24-Pergunnahs	21.12

5. That in relation to Sex, Class and Age, the mortality of the month stood as follows :—

According to Sex.		According to Class.		According to Age.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	27.00	Christians	19.20	Under 1 year	169.08
Females	23.16	Hindus	23.04	1 and under 5 years	85.20
Ratio of male deaths to every 100 female deaths	114	Mahomedans	29.64	5 " " 10 " "	10.92
		Budhists	22.82	10 " " 15 " "	8.60
		Other classes	20.28	15 " " 20 " "	15.12
				20 " " 30 " "	17.40
				30 " " 40 " "	19.32
				40 " " 50 " "	26.92
				50 " " 60 " "	38.64
				60 years and upwards	68.04

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,

Offg. Sanitary Commissioner for Bengal.

The 9th April 1888.

*Statement showing the Results of the Registration of Deaths in the Districts in Bengal for the month of January 1888.*

[illegible]

[illegible]

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,  
K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,  
Offg. Sanitary Commissioner for Bengal.  
The 26th April 1898

## MEMORANDUM.

THE birth and death returns from the principal Municipalities in Bengal furnish the following results for the week ending 24th March 1888.

1. That births and deaths were registered at the rates, respectively, of 22·5 and 29·3 per 1,000 of population, as opposed to 21·3 and 29·7 per 1,000, respectively, during the preceding week ending 17th March, showing an improvement in the registration of births.

2. That the highest proportions of births and deaths were returned from the following Municipalities:—

Births.			Deaths.		
		Ratio per mille.			Ratio per mille.
Narainganj	...	57·9	Comillah	...	80·8
Beaulah	...	49·9	Suburbs of Calcutta	...	58·7
Comillah	...	42·3	Uttarpara	...	47·2
Arrah	...	41·9	Serampore	...	43·2
Bhagulpore	...	31·7	Kishnaghur	...	39·8
Monghyr	...	30·7	Gya	...	32·8
			Howrah	...	31·5
			Beaulah	...	31·5
			Puri	...	31·5
			Burdwan	...	30·5

3. That in comparison with the results of the preceding week, there was a noticeable enhancement of mortality from cholera, and only small differences in the casualty-rates from the rest of the death causes, *vide* figures given below:—

						Ratio per mille during the weeks ending—	
						24th March 1888.	17th March 1888.
Cholera	...	...	...	...	...	9·3	8·2
Small-pox	...	...	...	...	...	·2	·1
Fever	...	...	...	...	...	3·8	0·9
Bowel-complaints	...	...	...	...	...	2·6	3·4
Injury	...	...	...	...	...	·4	·2
Other causes	...	...	...	...	...	7·0	7·8

4. That of the diseases abovenamed, cholera, fever and the maladies coming under the head of "other causes" proved conspicuously fatal in the following Municipalities, the other diseases exhibiting no special local severity:—

Cholera.		Fever.		Other causes.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Comillah	38·6	Comillah	26·9	Puri	14·7
Suburbs of Calcutta	30·7	Beaulah	23·6	Gya	11·6
Serampore	23·6	Kishnaghur	22·7	Dacca	11·0
Howrah	20·0			Suburbs of Calcutta	10·3
Kishnaghur	15·1				
Puri	8·4				
Gya	2·7				

5. That the mortality in relation to *Sex*, *Class* and *Age*, stood as noted below:—

According to Sex.		According to Class.		According to Age.	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	31·9	Christians	13·0	Under 1 year	198·9
Females	26·3	Hindus	28·9	1 and under 5 years	45·5
Ratio of male deaths to every 100 female deaths	137	Mahomedans	30·8	5 " 10 "	18·3
		Other classes	36·4	10 " 15 "	12·7
				15 " 20 "	17·2
				20 " 30 "	22·3
				30 " 40 "	22·8
				40 " 50 "	20·4
				50 " 60 "	36·0
				60 years and upwards	51·7

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,

The 9th April 1888.

Offr. Sanitary Commissioner for Bengal.

NAMES OF MUNICIPALITIES.	POPULATION.			BIRTHS.			MORTALITY ACCORDING TO—										SEX.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Males.	Females.	Total.	NUMBER OF—		RATIO PER 1,000 OF POPULATION PER ANNUM.	DEATHS FROM—						RATIO PER 1,000 OF POPULATION PER ANNUM.						Males.	Females.	Ratio of male deaths to every 100 female deaths.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
				Males.	Females.		Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.				Other diseases.	All causes.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Bombay	18,003	16,017	34,020	4	4	8	61	61	122	100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

A special census of the Europeans in the District of Calcutta was recently taken, as the census of this section of the community is not in February 1881, and not reliable owing to the Europeans being at a distance from their homes. The number of the natives recorded is 1,479,861, as it was not necessary to repeat them. The ratio has been calculated on the basis of the population under all heads in the above table. The ratio under which have been omitted, inasmuch as the census of the Europeans shows should be taken into account as a basis of calculation owing to the results of the census under this head also having been recorded under the authorized form of age classification.



## PUBLIC WORKS DEPARTMENT, BENGAL.

## IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1887-88.

Areas leased for Irrigation up to end of February 1888.

DISTRICT.	CANAL.	Estimated full discharge in month.	Average discharge in month.	Discharge utilized.	Approximate area of land irrigated during the year up to the end of the month.	Five years' crop.	DETAILS OF AREAS LEASED.										RAINFALL, 1887-88.		RAINFALL, 1886-87.		REMARKS.
							Kharif.	Rabi.	Sugar-cane.	Bhadra.	Hot weather.	Grand Total.	During month.	Up to end of month.	During month.	Up to end of month.					
																	Acres.	Acres.	Acres.	Acres.	
SOUTH-WESTERN.	Cauchook	Taldanda, 1st Branch, Taldanda, 2nd Branch.	1,542	257	0.36	7,024	4,249	55	82	107	7,615	0.70	54.08	0.70	54.08	62.84					
		Kandrapara	776	188	0.15	19,763	17,377	9	19	17	29,390	0.70	54.08	0.70	54.08	59.25					
		Gobri	372.83	27.75	0.15	87,963	81,536	434	19	490	41,892	0.70	54.08	0.70	54.08	47.85					
		Pattamooni High Range I, Level, High Range II, Level.	885	84.52	0.15	8,064	8,240	14	14	14	8,254	0.70	54.08	0.70	54.08	49.65					
		High Range II, Level, High Range III, Level.	727.16	84.32	0.15	1,518	430	84	92	100	7,832	1.19	53.04	1.19	53.04	47.85		Less than last month by 72 acres transferred to five years' lease.			
SOUTH-WESTERN.	Midsapore	Total of the corresponding period of last year.	1,411	32	0.15	57,020	57,020	515	171	771	103,036	1.07	53.25	1.07	53.25	47.85		Less than last month by 318 acres transferred to five years' lease.			
		Midapore	1,411	32	0.15	57,020	57,020	515	171	771	103,036	1.07	53.25	1.07	53.25	49.65		Less than last month by 318 acres transferred to five years' lease.			
		Howrah	528	32	0.15	4,787	547	36	1,162	1,198	5,419	1.82	59.01	1.82	59.01	47.85		Less than last month by 318 acres transferred to five years' lease.			
		Total	6,024	68,042	68,042	68,042	1,108	68,042	68,042	68,042	68,042	1,108	68,042	1,108	68,042	47.85		Less than last month by 72 acres transferred to five years' lease.			
		Shahabad	4,312	1,107	0.15	30,554	30,554	36	1,162	1,198	5,419	1.82	59.01	1.82	59.01	47.85		Less than last month by 318 acres transferred to five years' lease.			
SOUTH-WESTERN.	Patna	Total of the corresponding period of last year.	4,312	1,107	0.15	30,554	30,554	36	1,162	1,198	5,419	1.82	59.01	1.82	59.01	47.85		Less than last month by 318 acres transferred to five years' lease.			
		Patna	4,312	1,107	0.15	30,554	30,554	36	1,162	1,198	5,419	1.82	59.01	1.82	59.01	47.85		Less than last month by 318 acres transferred to five years' lease.			
		Gya.	1,466	427	0.15	61,112	61,112	1,108	68,042	68,042	68,042	1,108	68,042	1,108	68,042	47.85		Less than last month by 318 acres transferred to five years' lease.			
		Total	318,337	295,603	295,603	295,603	43,281	18,592	3,891	324	9,813	73,332	291,112	291,112	291,112	47.85		Less than last month by 318 acres transferred to five years' lease.			
		Grand Total of the corresponding period of last year.	477,369	418,625	418,625	418,625	168,103	15,365	4,062	224	9,813	73,332	431,166	431,166	431,166	47.85		Less than last month by 318 acres transferred to five years' lease.			

The 10th April 1888.

A. D. MCARTHUR, Major, R.E.,  
Under-Secretary to the Govt. of Bengal.



## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

## SOUTH-WESTERN CIRCLE.

## ORISSA COAST CANAL SYSTEM.

LENGTH OF CANAL OPEN, 97½ MILES.

Statement showing Quantities of Goods carried during the month of February 1888.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
453	1. Grain ...	3,936	274	4,210	1,41,436	4,210	1,41,436	
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....	
2	3. Oilseeds ...	5	.....	5	390	5	390	
37	4. Salt ...	.....	334	334	25,670	334	25,670	
8	5. Piece-goods ...	.....	19	19	8,250	19	8,250	
2	6. Metal ...	.....	4	4	350	4	350	
3	7. Building materials ...	4	7	11	425	11	425	
862	8. Miscellaneous ...	119	591	710	79,850	710	79,850	
32	9. Fuel ...	.....	488	488	13,323	488	13,323	
4 rafts	10. Timber ...	466 c. ft.	.....	466 c. ft.	741	466 c. ft.	741	
21 "	11. Bamboos ...	1,275 "	2,902 c. ft.	4,177 "	201	4,177 "	201	
1,399 & 25 rafts	12. Total ...	{ 4,064 & 1,741 c. ft.	{ 1,717 & 2,902 c. ft.	{ 5,781 & 4,643 c. ft.	{ 2,70,636	{ 5,781 & 4,643 c. ft.	{ 2,70,636	
1,036 & 13 rafts	13. Total of same month last year	{ 3,641 & 1,332 c. ft.	{ 429 & 140 c. ft.	{ 4,070 & 1,472 c. ft.	{ 1,57,822	{ 4,063 & 1,472 c. ft.	{ 1,57,622	
		Up.	Down.	Total.				Rs. A. P.
14. Total number of boats plying cargo		No. 674	725	1,399	Total tollage of month— 24+25+26			6,212 15 0
15. Total number of boats plying passenger		No. 26	52	78	Total tollage of same month last year			3,957 15 3
16. Total registered tonnage, cargo		Tons 8,310	5,892	14,202	Memorandum of Tollage.			
17. Total registered tonnage, passenger		Tons 391	535	926				
18. Ton mileage		.. 200,889	150,761	351,650				
19. Estimated value of cargo		Rs. 1,43,628	1,26,066	2,69,694				
20. Number of passengers		... 1,141	1,629	2,773				
21. Rafts, bamboos		c. ft. 1,275	2,902	4,177				
22. Do., bullocks		" 466	.....	466				
23. Estimated value of rafts		Rs. 178	764	942				
24. Tollage on boats		" 3,158-11-6	2,231-13-0	5,410-8-6				
25. Compounded tollage on boats		Rs. 379-12-0	394-12-0	774-8-0				
26. Tollage on rafts		" 16-6-0	11-8-6	27-14-6				
27. Total tollage on boats per ton mile		.....	.....	2-95				
28. Total tollage on rafts per 100 cubic feet		.....	.....	0-9-7				
					1. Balance not recovered on the 1st of the month			Rs. A. P. 5,401 0 0
					2. Tollage per month			6,212 15 0
					3. Total			11,613 15 0
					4. Amount paid into treasury during the month			6,728 10 0
					5. Balance due at the end of the month			4,885 5 0

Abstract for the month of February 1888 as compared with the corresponding month of the previous year.

	1887-88.		1886-87.	
	During the month.	To end of the month.	During the month.	To end of the month.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Tollage	6,212 15 0	48,090 2 0	3,957 15 3	23,775 2 0

CALCUTTA,  
The 10th April 1888.A. D. MOARTHUR, Major, B.E.,  
Under-Secretary to the Government of Bengal.

## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL

## SOUTH-WESTERN CIRCLE.

## NUDDEA RIVERS.

Statement showing Quantities of Goods carried during the month of February 1888.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
852	1. Grain ...	2,098	4,693	6,791	2,91,496	6,791	2,91,496	
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....	
66	3. Oilseeds ...	2	788	790	85,895	790	85,895	
348	4. Salt ...	2,369	.....	2,369	2,31,697	2,369	2,31,697	
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
23	6. Metal ..	76	8	84	20,750	84	20,750	
34	7. Building materials	73	188	261	19,972	261	19,972	
668	8. Miscellaneous ...	1,301	2,978	4,279	7,17,549	4,279	7,17,549	
59	9. Fuel ...	451	120	571	5,195	571	5,195	
44 rafts	10. Timber ..	1,900 c. ft.	9,225 c. ft.	11,125 c. ft.	30,380	11,125 c. ft.	30,380	
10 "	11. Bamboos ...	.....	4,230 "	4,230 "	432	4,230 "	432	
1,050 & 58 rafts	12. Total ...	{ 6,370 & 1,900 c. ft.	{ 8,775 & 13,455 c. ft.	{ 15,145 & 15,355 c. ft.	{ 14,06,366 & 15,355 c. ft.	{ 15,145 & 15,355 c. ft.	{ 14,06,366 & 15,355 c. ft.	
2,187 & 83 rafts.	13. Total of same month last year	{ 7,578 & 268 c. ft.	{ 12,556 & 39,710 c. ft.	{ 20,134 & 39,978 c. ft.	{ 13,96,779 & 39,978 c. ft.	{ 20,134 & 39,978 c. ft.	{ 13,96,779 & 39,978 c. ft.	
		Up.	Down.	Total.				Rs. A. P.
4. Total number of boats plying cargo No.		1,095	955	2,050	Total tollage of month— 24+25+26 ...			8,874 11 0
4A. Ditto empty boats, &c. ...		683	166	849	Total tollage of same month last year ...			9,622 1 "
5. Total number of boats plying passenger No.		840	829	1,669				
5A. Empty boats ...		30	4	34				
6. Total registered tonnage, cargo Tons		22,175	17,767	39,942	Memorandum of Tollage.			
7. Total registered tonnage, passenger Tons		209	428	637				
8. Ton mileage		.....	.....	.....				Rs. A. P.
9. Estimated value of cargo Rs.		5,16,407	8,59,147	13,75,554				
10. Number of passengers ...		2,135	2,133	4,268	1. Balance not recovered on the 1st of the month ...			281 13 0
Rafts, bamboos c. ft.		.....	4,230	4,230	2. Tollage per month ...			8,874 11 0
Do., bullahs "		1,990	9,225	11,125	3. Total ...			9,156 8 0
Estimated value of rafts Rs.		3,225	27,587	30,812	4. Amount paid into Treasury during the month ...			8,946 0 6
Tollage on boats "		4,290-15-6	4,305-15-0	8,596-14-6	5. Balance due at the end of the month ...			210 7 6
Compounded tollage on boats Rs.		.....	.....	.....				
Tollage on rafts "		18-6-0	259-6-6	277-12-6				
* Total tollage on boats per ton-mile ...		.....	.....	...				
Ditto on rafts per 100 cubic feet ...		.....	.....	1-12-11				

\* Boats in these rivers do not pay per mile.

Abstract for the month of February 1888, as compared with the corresponding month of the previous year.

	1887-88.		1886-87.	
	During the month.	To end of the month.	During the month.	To end of the month.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Tollage	8,874 11 0	1,90,400 4 4	9,622 1 9	1,93,014 8 3

A. D. McARLSON, Major, R.E.,  
Under-Secy. to the Govt. of Bengal.

## CIRCULAR AND EASTERN CANALS.

*Approximate return of traffic for the week ending Saturday, the 7th April 1888,  
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 7TH APRIL 1888.			WEEK ENDING SATURDAY, THE 8TH APRIL 1887.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	427	1,53,945	2,633	528	1,81,455	3,253
Jute	23	13,025	200	59	45,250	795
Firewood	121	58,547	797	202	1,13,950	1,439
Other articles	841	1,76,000	2,706	926	2,40,253	3,573
Total	1,415	4,01,557	6,336	1,715	5,80,910	9,060

## Nalhati State Railway.

Statement showing Increases and Decreases in tonnage of Staples carried over the Nalhati State Railway during the month of February 1888, as compared with the same month of the previous year.

STAPLES.	1887.		1888.		1887.	1888.	Increase.	Decrease.
	Up.	Down.	Up.	Down.	Total.	Total.		
Coal	Tons. 750	Tons.	Tons. 291	Tons.	Tons. 788	Tons. 201	Tons.	Tons. 465
Cotton, raw	20		5		20	5		15
Cotton twist and yarn—								
1.—European	1				1			1
Cotton piece-goods—								
1.—European	44	1	56		45	56	11	
2.—Indian	1				1			1
Dyes and tints—								
1.—Indigo				4		4	4	
Jute—								
1.—Raw		14			14			14
2.—Gunny-bags and cloths	23	0		4	23	31	8	
Grains—								
2.—Rice	35	784	15	1,478	827	1,493	666	
4.—Gram		2		6	2	6	4	
5.—Others	0	18	8	21	8	26	18	
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed		1		4	1	4	3	
Leather, manufactured		4		1	4	5	1	
Liquors—								
1.—Beer	1		1		1	1		
2.—Wines	1		1		1	1		
Metals—								
2.—Iron	10		1		10	1	9	
4.—Others	2	5	0	4	7	8	1	
Oils—								
1.—Castor	1				1			1
2.—Kerosine	5		4		5	4	1	
3.—Others	1		7		1	7	6	
Provisions—								
1.—Others	6		3		6	3	3	
2.—Dried fruits and nuts	3		3		3	3		
3.—Others	3	1	32		36	33	3	
Railway plant and rolling-stock		10				41	31	
Salt	13	1	25		14	25	11	
Oilseeds—								
1.—Linseed				22		22		22
2.—Mustard and rape	32		285		39	285	246	
ii.—Others	64		102			102	38	
Silk, raw—								
2.—Indian	74	25	27	27	99	54	45	
Silk piece-goods—								
2.—Indian	1	3		5	4	5	1	
Stone and lime	1		13	2	1	14	13	
Sugar—								
1.—Drained	13		10		23	16	7	
2.—Undrained	3		13		16	13	3	
Tobacco	3		2	1	5	3	2	
Paper and pasteboard	1				1			1
Umbrellas	2		1		3	1	2	
& other articles of merchandise	31	14	29	14	45	103	58	
Total	1,173	808	1,064	1,503	2,671	3,437	766	

## INCREASE.

Tons.

Cotton piece-goods ... 11  
 There being no sufficient water in the river Bhagiratty, the steamer service between Calcutta and Jaganj is stopped, and the merchants are bringing their goods by rail; hence the increase.  
 Grains—(2) Rice ... 666  
 The increase under this head is due to greater despatches from the intermediate stations owing to good crops and favourable demands this year.  
 Provisions—(3) Others ... 28  
 The increase under this head is due to potatoes being carried by rail this year.  
 Railway plant and rolling-stock ... 31  
 This increase is due to greater materials carried during the month.  
 Salt ... 11  
 The river communication being stopped, the merchants are bringing their goods by rail; hence the increase.  
 Oilseeds—(1) Linseed ... 22  
 The increase under this head is due to river communication being stopped; the merchants are bringing their goods by rail.  
 (2) Mustard and rape ... 259  
 Ditto ditto and to favourable demands.  
 Stone and lime ... 13  
 This increase is due to more materials carried this year for building purposes.  
 Sugar—(2) Undrained ... 10  
 This increase is due to favourable demand.

## DECREASE.

Coal ... 465  
 This decrease is due to increase in previous month.  
 Cotton, raw ... 15  
 This decrease is due to increase in previous month.  
 Jute—(1) Raw ... 14  
 This decrease is due to dull market.  
 Silk, raw—(2) Indian ... 45  
 This decrease is due to less import of tasar cocoons this year.

R. G. MOOKERJEE, Manager, Nalhati State Railway.

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 31st March 1888, on 1,513½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	243,560	2,94,648 8 0	50,66,824 10	0,23,038 7 7	22,687 4 8	9,31,112 4 1	85,092½	703,509½	1,69,582½
Or per mile of railway ...	161 10 0	195 10 0	33,481 10 0	15 11 0	15 11 0	615 1 8	56 10 0	464 10 0	102 10 0
For previous 12 weeks of half-year ...	3,200,631	37,81,283 0 0	5,35,83,324 0	70,77,591 0 9	2,72,212 10 4	1,30,33,628 4 1	707,076½	1,202,616½	2,059,692½
Total for 13 weeks ...	3,440,391	40,75,931 8 0	5,86,40,148 10	80,81,548 1 4	2,94,940 15 10	1,30,64,649 8 2	864,058	1,905,116½	2,769,174½
COMPARISONS.									
Total for corresponding week of previous year ...	240,302	2,88,389 1 4	47,75,688 10	7,32,396 2 0	19,633 2 10	10,30,326 6 11	76,920	116,708	187,718
Per mile of railway corresponding week of previous year ...	158 10 0	190 10 0	31,541 10 0	475 0 2	12 4 8	684 8 0	51 10 0	77 10 0	93 10 0
Total to corresponding date of previous year ...	3,330,087	39,15,035 8 2	5,45,20,514 20	68,61,949 12 0	2,43,396 7 5	1,30,21,272 9 1	807,844	1,465,547	2,333,391

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31ST MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 2ND APRIL 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
1,519	10,39,326	684	1,519	9,31,112	615	1,515½	4,00,85,814	696	1,516½	4,68,23,308	687	.....	6,02,416

## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 31st March 1888, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	14,986	7,697 2 0	40,027 20	2,752 8 0	53 0 0	10,499 3 0	1,896	496	2,392
Or per mile of railway ...	261	134 6 3	700 0	48 1 11	0 15 0	183 7 2	33 10 0	8 6 0	41 7 2
For previous 12 weeks of half-year ...	182,480*	1,01,154 15 0*	3,50,037 0†	26,119 6 0†	583 5 0‡	1,27,257 10 0	22,318	9,962	32,280
Total for 13 weeks ...	197,466	1,08,852 1 4	4,40,164 20	28,871 16 0	616 14 0	1,37,514 10 0	24,216	7,448	31,664
COMPARISONS.									
Total for corresponding week of previous year ...	16,236‡	7,292 14 7	69,658 0	4,194 4 0	11 8 0	13,498 12 4	1,677	1,739	3,416
Per mile of railway corresponding week of previous year ...	284	126 7 0	1,217 0	75 1 2	1 1 10	238 10 5	29 10 0	30 10 0	59 10 0
Total to corresponding date of previous year ...	183,271	1,04,382 1 3	7,77,041 20	43,040 12 0	734 10 0	1,52,167 8 0	22,730	12,745	35,475

\* Added No. of passengers 12,189 and Rs. 8,183 0 0.

† Deducted Mds. 42 and added

‡ Added

on account of differences between the approximate and audited returns to week ended 25th February 1888.

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31ST MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 2ND APRIL 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
57½	12,661	220	57½	10,499	183	57½	5,51,320	183	57½	5,00,664*	171	.....	51,656

\* Added Rs. 697 on account of supplemental return to 31st December 1887.

## DILDARNAGAR-GHAZIPUR STATE RAILWAY.

Approximate Return of Traffic for week ended 31st March 1888, on 12 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. B.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	2,992	490 0 0	18,393 0	880 15 0	15 0 0	900 15 0	590 1/2	107	697 1/2
Or per mile of railway	41 1/2	41 1/2		83 3 3	1 3 0	75 14 7			
For previous 12 weeks of half-year	35,757*	5,978 7 0	2,64,912 0†	5,567 4 0†	134 3 0‡	11,679 14 0	4,965	1,857	6,822
Total for 13 weeks	38,749	6,471 7 0	2,83,305 0	6,457 3 0	149 3 0	12,500 13 0	5,455 1/2	2,014	7,469 1/2
COMPARISON.									
Total for corresponding week of previous year	2,894	487 9 7	17,319 0	423 16 0	0 8 0	918 0 7	314	170	484
Per mile of railway corresponding week of previous year		40 10 2		35 5 3	0 3 8	76 8 1			
Total to corresponding date of previous year	38,395‡	6,460 1 4	2,64,193 20	6,521 4 0	101 5 0	11,672 0 1	4,968	2,012	6,980

\* Added No. of passengers 1,816 and Rs. 185 0 0

† Ditto Mds. 5,099 and deducted

‡ Ditto

on account of differences between the approximate and audited returns to week ended 25th February 1888.

Approximate Statement of gross receipts of the Dildarnagar-Ghazipur State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31ST MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 2ND APRIL 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.
12	918	77	12	911	76	12	47,951	77	12	48,119*	77	108	

\* Added 168 on account of difference between the approximate and audited returns to week ended 25th February 1888.

## SINDIA STATE RAILWAY.

Approximate Return of Traffic for week ended 31st March 1888, on 74 1/2 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. B.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	4,381	3,302 7 0	87,360 20	3,464 12 0	124 8 0	3,588 11 8	697	1,325 1/2	2,022 1/2
Or per mile of railway	58 1/2	44 2 5		46 5 1	1 10 8	52 2 2			
For previous 12 weeks of half-year	62,641*	46,467 0 0	11,02,434 20†	51,621 8 0†	1,445 11 0	53,066 11 0	8,035 1/2	19,063 1/2	27,100
Total for 13 weeks	67,022	49,767 7 0	11,90,794 0	55,086 5 0	1,570 3 0	56,656 15 0	8,732 1/2	20,411 1/2	29,144 1/2
COMPARISON.									
Total for corresponding week of previous year	5,467	3,688 8 0	1,01,808 20	4,603 0 0	135 13 3	4,738 1 0	768	1,363	2,131
Per mile of railway corresponding week of previous year		51 14 8		61 8 7	1 13 1	63 4 4			
Total to corresponding date of previous year	70,131	57,091 7 0	12,98,102 10	60,208 5 0	1,888 11 0	62,096 11 11	8,808	16,570	25,378

\* Added No. of passengers 886 and deducted Rs. 310 0 0

† Ditto Mds. 35,561-20 and

‡ Deducted

on account of differences between the approximate and audited returns to week ended 25th February 1888.

Approximate Statement of gross receipts of the Sindia State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31ST MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 2ND APRIL 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
74½	4,381	118	74½	4,398	91	74½	4,04,480	103	74½	4,41,117*	113	34,850	

\* Added Rs. 114 on account of supplemental return to 31st December 1887.

on account of differences between the approximate and audited returns to week ended 25th February 1888.

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 31st March 1888, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	10,423	Rs. 4,832 3 0	Mds. 1,640 10	Rs. 284 4 0	Rs. 7 8 0	Rs. 5,424 15 3	888	83	971
Or per mile of railway	.....	219 3 4	.....	17 4 4	0 5 3	248 13 11	.....	.....	.....
For previous 13 week of half-year	245,840*	86,136 13 0*	1,04,967 20†	3,633 9 0†	81 3 0†	89,841 9 0	10,766	982	11,748
Total for 13 weeks	268,271	71,039 4 0	1,13,747 30	4,017 13 0	82 8 0	76,206 5 0	11,353	1,464	12,718
COMPARISON.									
Total for corresponding week of previous year	17,467	4,623 15 5	5,075 0	316 4 0	5 14 0	4,939 13 11	900	50	950
Per mile of railway corresponding week of previous year	.....	207 13 1	.....	13 15 0	0 4 3	222 0 4	.....	.....	.....
Total to corresponding date of previous year	202,971‡	68,124 1 9	1,14,648 10	3,762 10 0	84 4 9	71,971 0 0	12,410	688	13,040

\* Added No. of passengers 5,620 and Rs. 1,732 0 0 }  
 † Deducted Mds. 609 and added .. 86 0 0 } on account of differences between the approximate and audited returns to week ended 25th February 1888.  
 ‡ Added .. 86 0 0 }

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31ST MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1884 TO 2ND APRIL 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1888.			Total increase in 1888.	Total decrease in 1888.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	.....
22½	Rs. 4,840	222	22½	Rs. 5,425	244	22½	Rs. 2,17,503	214	22½	Rs. 2,64,450*	232	Rs. 21,192	.....

\* Added Rs. 1,844 on account of differences between the approximate and audited returns to week ended 25th February 1888.

## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K. AND D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for week ended 24th March 1888, on 676 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-haul.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week	122,263	Rs. 64,037 0 0	Mds. 4,40,434	Rs. 65,873 0 0	Rs. 21,084 0 0	Rs. 1,39,104 0 0	23,000	23,000	46,000
Or per mile of railway	181	95 0 0	650 0	96 0 0	3 0 0*	191 0 0	.....	.....	.....
For previous 11 weeks of half-year	1,433,592	8,45,755 0 0	6,87,829 0	9,31,447 0 0	1,63,447 0 0	19,41,640 0 0	240,080	254,064	494,124
Total for 12 weeks	1,627,562	9,09,793 0 0	65,34,237 0	9,96,320 0 0	1,74,531 0 0	20,80,043 0 0	272,086	277,064	549,124
COMPARISON.									
Total for corresponding week of previous year	125,648	62,687 0 0	4,72,162 0	59,329 0 0	10,917 0 0	1,31,933 0 0	19,304	17,505	36,809
Per mile of railway corresponding period of previous year	207	103 0 0	779 0	96 0 0	3 0 0*	201 0 0	.....	.....	.....
Total to corresponding date of previous year	1,691,862	8,04,323 0 0	67,25,316 0	8,89,010 0 0	1,56,328 0 0	19,40,036 0 0	281,577	287,000	518,905

\* Audited up to 16th February 1888.

## FINANCIAL YEAR.

Approximate Statement of Gross Receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 25TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 24TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 25TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	.....
696	Rs. 1,31,933	218	676	Rs. 1,39,804	200	696	Rs. 32,64,735	267	649	Rs. 33,76,574*	■	Rs. 11,38,840	.....

\* Audited up to 16th February 1888.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 24th March 1888, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	26,804	0,624 0 0	61,736 0	5,283 0 0	38 0 0	14,948 0 0	3,600	1,833	5,433
Or per mile of railway ...	207	77 0 0	502 0	42 0 0	...	120 0 0	...	...	...
For previous 11 weeks of half-year ...	281,473	1,02,514 0 0	5,35,834 0	42,016 0 0	2,910 0 0	1,47,500 0 0	84,531	10,185	94,716
Total for 12 weeks ...	307,366	1,12,238 0 0	6,12,570 0	47,243 0 0	2,987 0 0	1,62,437 0 0	42,101	21,018	63,309
COMPARISON.									
Total for corresponding week of previous year ...	24,540	8,126 0 0	51,113 0	3,032 0 0	51 0 0	12,198 0 0	3,517	1,705	5,222
Per mile of railway corresponding period of previous year ...	196	73 0 0	457 0	29 0 0	...	102 0 0	...	...	...
Total to corresponding date of previous year ...	308,108	1,06,024 0 0	4,21,073 0	27,764 0 0	601 0 0	1,34,893 0 0	43,403	20,040	63,443

\* Audited up to week ending 18th February 1888.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 24TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 24TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 24TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
125	12,788	102	125	14,928	119	125	5,63,383	88	125	6,50,443*	103	51,065	...

\* Audited up to week ending 18th February 1888.

## DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 24th March 1888, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,415	4,300 0 0	13,737 0	900 0 0	85 0 0	5,494 0 0	2,141	903	3,044
Or per mile of railway ...	150	57 0 0	160 0	10 0 0	1 0 0	68 0 0	...	...	...
For previous 11 weeks of half-year ...	151,484	40,273 0 0	1,80,634 0	12,324 0 0	1,700 0 0	43,303 0 0	23,046	10,444	33,490
Total for 12 weeks ...	169,899	44,573 0 0	1,94,371 0	13,224 0 0	1,785 0 0	49,197 0 0	25,187	11,407	36,594
COMPARISON.									
Total for corresponding week of previous year ...	11,509	4,354 0 0	3,272 0	021 0 0	207 0 0	5,172 0 0	2,528	1,565	3,893
Per mile of railway corresponding period of previous year ...	146	50 0 0	38 0	7 0 0	3 0 0	60 0 0	...	...	...
Total to corresponding date of previous year ...	164,570	55,046 0 0	2,29,614 0	21,311 0 0	2,620 0 0	78,307 0 0	27,130	14,554	41,684

\* Audited up to week ending 18th February 1888.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 24TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 24TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1886 TO 24TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
86	1,774	20	86	4,204	49	86	2,14,229	63	86	2,92,560*	67	21,349	...

\* Audited up to week ending 18th February 1888.



## ASSAM-BEHAR STATE RAILWAY.

(PURNEAH SECTION.)

Approximate Return of Traffic for week ended 24th March 1888, on 39 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,842 *	780 0 0	3,615 0	2,040 0 0	15 0 0	3,435 0 0	546	540	1,086
Or per mile of railway ...	73	20 0 0	780 0	520 0 0	...	88 0 0	...	...	...
For previous 11 weeks of half-year ...	22,512	11,431 0 0	2,30,864 0	20,871 0 0	406 0 0	32,780 0 0	5,000	5,000	10,000
Total for 12 weeks ...	35,064	12,211 0 0	2,70,300 0	23,311 0 0	421 0 0	30,706 0 0	6,502	6,502	13,004
COMPARISON.									
Total for corresponding week of previous year ...	...	...	...	...	...	...	...	...	...
Per mile of railway corresponding period of previous year ...	...	...	...	...	...	...	...	...	...
Total to corresponding date of previous year ...	...	...	...	...	...	...	...	...	...

\* Audited up to week ending 18th February 1888.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Assam-Bihar State Railway.

RECEIPTS FOR WEEK ENDING 24TH MARCH 1887.			RECEIPTS FOR WEEK ENDING 24TH MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 24TH MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.					Rs.	Rs.	Rs.	
...	...	...	...	3,435	88	...	...	...	39	1,23,283*	62	1,23,283	...

\* Audited up to week ending 18th February 1887.

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for the week ending 31st March 1888, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	3,009	1,151 0 0	9,732 10	624 0 0	7 8 0	1,781 0 0	509	254	763
Or per mile of railway ...	113	42 0 0	357 0	22 13 0	0 4 0	65 5 0	...	...	...
For previous 11 weeks of half-year ...	30,770	14,075 13 0	2,28,022 30	11,955 11 0	335 5 0	27,106 0 0	6,108	5,051	11,159
Total for 12 weeks ...	42,862	16,127 0 0	2,37,755 0	12,509 0 0	341 0 0	24,879 0 0	6,617	5,235	11,852
COMPARISON.									
Total for corresponding week of previous year ...	2,819	1,077 13 0	18,073 30	1,005 4 0	17 11 0	2,101 12 10	509	254	763
Per mile of railway corresponding week of previous year ...	103	39 0 0	663 0	40 4 0	0 10 0	80 7 0	...	...	...
Total to corresponding date of previous year ...	40,410	16,065 13 6	1,94,788 30	10,585 13 11	410 13 4	20,092 0 0	5,080	4,371	9,451

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31ST MARCH 1888.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1887.			TOTAL RECEIPTS FROM 1ST APRIL 1887 TO 31ST MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.					Rs.	Rs.	Rs.	
...	...	...	...	1,781	65	...	...	...	...	27,106*	60	...	...

\* Includes amount accounted for in the Supplementary traffic statement for week ending 31st December 1887.

## TIRHOOT STATE RAILWAY.

Approximate Return of Traffic for the week ending 31st March 1888, on 250 miles open.

	COACHING TRAFFIC.		MERCHANTILE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week on 250 miles open	48,177	Rs. A. P. 15,318 0 3	Mds. S. 1,66,801 10	Rs. A. P. 17,619 0 0	Rs. A. P. 2,841 0 6	Rs. A. P. 35,179 10 9	5,802	6,571	12,373
Or per mile of railway	167	59 2 0	665 11	69 11 0	2 15 6	137 11 0*	...	...	...
For previous week of half-year	519,923	2,08,554 11 9	21,84,370 30	2,67,372 10 0	30,418 15 6	5,11,407 0 9	79,900	101,940	181,840
Total for 13 weeks	550,000	2,23,873 0 0	24,47,672 0	2,90,452 0 0	42,261 0 0	5,46,584 0 0	84,782	108,511	193,293
COMPARISON.									
Total for corresponding week of previous year on 236 miles open	42,734	15,206 4 7	1,51,338 0	20,718 8 0	2,776 15 11	39,695 12 6	5,945	6,839	12,784
Or per mile of railway corresponding week of previous year	174	64 13 0	778 0	84 4 0	1 1 6	147 3 0*	...	...	...
Total corresponding date of previous year	462,119	1,60,202 5 11	21,35,614 10	2,14,048 4 6	40,891 0 6	4,61,792 3 10	79,708	74,467	154,175

\* Steam boat earnings excluded in calculating "Total earnings per mile of Railway."

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Tirhoot State Railway.

RECEIPTS FOR WEEK ENDING 2ND APRIL 1887.			RECEIPTS FOR WEEK ENDING 31st MARCH 1888.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 2ND APRIL 1887.			TOTAL RECEIPTS FROM 1st APRIL 1887 TO 31st MARCH 1888.			Total increase in 1887-88.	Total decrease in 1887-88.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	
240	30,700	157	209	30,179	130	240	16,30,471	127	212 57	18,51,250	141	2,30,779	...

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

Rs.

Approximate earnings for week ending 24th March 1888	...	...	8,980
Corresponding week last year	...	...	7,662
Increase	...	...	1,318
Receipts from 1st January to 24th March 1888	...	...	93,516
From 1st January to 26th March 1887	...	...	74,183
Increase	...	...	19,333
			Miles.
Miles open, week ending 24th March 1888	...	...	51
Corresponding week last year	...	...	51
			Rs. A. P.
Receipts per mile open, week ending 24th March 1888	...	...	178 1 3
Corresponding week last year	...	...	150 3 9
Increase	...	...	25 13 6



# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, APRIL 18, 1888.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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*Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament 24 and 25 Vic., Cap. 67.*

The Council met at the Council Chamber on Wednesday, the 4th April, 1888, at 11 A.M.

#### Present :

The HON. SIR STEWART COLVIN BAYLEY, K.C.S.I., C.I.E., Lieutenant-Governor of Bengal, *presiding*.

The HON. H. J. REYNOLDS, C.S.I.

The HON. C. P. L. MACAULAY, C.I.E.

The HON. T. T. ALLEN.

The HON. SIR HENRY HARRISON, K.T.

The HON. SIR ALFRED CROFT, K.C.I.E.

The HON. MOULVIE ABDEL JUBBAR.

The HON. BABU KALI NATH MITTER.

The HON. DR. MAHENDRA LAL SIRCAR, C.I.E.

The HON. C. H. MOORE.

The HON. DR. GOOROO DASS BANERJEE.

The HON. H. PRATT.

## NEW MEMBER.

The Hon. Mr. PRATT took his seat in Council.

## CALCUTTA AND SUBURBAN MUNICIPALITIES AMALGAMATION BILL.

The Hon. Sir HENRY HARRISON moved that the final Report of the Select Committee on the Bill to consolidate and amend the law relating to the municipal affairs of the Town and Suburbs of Calcutta be taken into consideration in order to the settlement of the clauses of the Bill.

The motion was put to the vote and carried.

The Hon. Sir HENRY HARRISON also moved that the clauses of the Bill, as further amended, be considered for settlement in the form recommended by the Select Committee.

The motion was put to the vote and carried.

The Hon. Sir HENRY HARRISON said:—We have already considered the first 36 sections of the Bill, and therefore I move that we begin with section 37. The first amendment on the list of business belongs to the chapter of definitions, and will naturally come on for discussion when that chapter is considered. As we have only to-day seen the exact line which the Hon. Member wishes to take, we shall be able to consider it at another meeting.

HIS HONOUR THE PRESIDENT said:—The Hon. Dr. Gooroo Dass Banerjee may explain to-day what his motion is, and we may postpone the discussion to another day.

The Hon. Dr. GOOROO DASS BANERJEE said:—The amendment of which I have given notice regarding the definition of "Calcutta" differs only in one respect from definition No. 7 in the Bill. It excludes from the Suburban area which the definition in the Bill proposes to include only a portion on the south side, namely the portion bounded on the north by the line of roads commencing from the east with the Tiljullah Road, and going along the Ballygunge Circular Road, the Puddopookur Road, the Pakoortollah Road, and the Chaoollputty Road, till it comes to a point where Tolly's Nullah turns south; and the portion excluded in my amendment has, for its western boundary, Tolly's Nullah. This is how it appears on the map. The line marked blue is the northern boundary of the portion I propose to exclude; and the other line, which is Tolly's Nullah, is the western boundary. The parts of the portion excluded, which are in the immediate vicinity of the northern and western boundaries, are, it is true, populous; but as we proceed further on towards the south from the northern boundary and towards the east from the western boundary, we come to places which are scarcely suburban, and which are of a rural character, and may safely be excluded from the operation of the Bill. I have no objection to postpone the discussion of the question now, but in that case I will ask permission to come back to any part of the Bill which may involve any question as to the extent of area involved, if such part is disposed of before the question of the definition is finally settled. I do not however think there is any important part of the Bill, which will render this necessary, now that we have disposed of the question of the number of wards.

The Hon. Dr. MAHENDRA LAL SIRCAR said:—I have to request that maps showing the proposed boundaries be circulated to the members; otherwise it will be impossible to come to any definite conclusion as to what the boundaries should be. This is what I have been insisting upon from the beginning, as I have not been able to procure a map which gives the correct boundaries in the plan.

HIS HONOUR THE PRESIDENT said:—I think that the map which the hon. mover of the amendment has will show very distinctly what he proposes. I do not wish to postpone the discussion till the end of the Bill, but I thought that if the hon. member explained to-day what he proposes, we may give ourselves till the next meeting to consider his proposals after

having seen his map, instead of merely trying to follow the printed description of the boundaries. I think we might be able to meet the hon. gentleman to a certain extent. The portion of country which he wishes to exclude is no doubt distinctly of a rural character, but I should have preferred if he took the Bhowanipore and Kallighat road as the western boundary, instead of the Tollygunge road, because the part of country between them is distinctly of an urban character, and very thickly populated. If we could come to an agreement on these lines, I shall be glad to try to meet him. We can discuss the matter at our next meeting after the hon. gentleman has seen on the map the boundaries which the hon. mover of the amendment proposes to prescribe.

The further discussion of the amendment was postponed on this understanding.

The HON. BABU KALI NATH MITTER moved that (c), (d), (e), (f), (g), (h), (i), (j) and (k) of clause 5 and clause (6) of section 37 be omitted. He said:—When this Bill was before the Council on the last occasion, the section which is now No. 37 was then section 30, and in the latter certain matters only were included as the duties of the Corporation. Take for instance the naming of streets and the numbering of premises. If general default is made by the Commissioners in the numbering of streets, they are to be superseded. I do not think it was ever intended that such should be the case, nor is it very likely to happen. The construction and maintenance of public latrines, urinals, and other public conveniences. These matters depend very much upon the funds at the disposal of the Commissioners as to the extent to which they may be in a position to carry out such works; but if these are put in the section as duties to be performed by the Commissioners, they would have to be performed irrespective of the question whether funds are available or not. The section which has already been passed (section 36) declares the purposes to which the Municipal Fund may be applied, and I think that should be sufficient, leaving it to the discretion of the Commissioners to carry out those objects as far as might be practicable. Then, with regard to the watering and lighting of streets. The whole of the town at the present moment has not been lighted. It would depend very much on the state of the funds as to what parts can be lighted and what cannot be lighted; and therefore it is essentially necessary to leave it as a matter of discretion as at present and not to convert it into a duty. Then, again, as regards the abatement of nuisances. There is a section of the Bill (section 389) which shows that the Commissioners have to be satisfied that there is real necessity for taking up a case before they can be called upon to take it up. But if it is to be a duty, then as soon as a complaint is made they will have to take it up as a duty; there is no discretion left. Under these circumstances, I move that the clauses which I have mentioned be omitted from section 37. I wish it to be distinctly understood that I do not for a moment mean that by the exclusion of these clauses, I intend that the Commissioners are not to give these matters their very best consideration; but having regard to the large area to be included in the town it is very difficult to foresee what the Commissioners will be able to do.

The HON. SIR HENRY HARRISON said:—I wish to ask whether it will be possible to consider amendments Nos. (2) to (5) together, voting upon them of course separately, because the Hon. Member who has just moved amendment No. (2) has admitted that the objection does not lie to the clause itself, but only when it is read with section 38. It seems to me that substantially the question involved by amendments Nos. (2) to (5) is an alteration in the framework of section 37 as read with section 38. I think it would shorten and simplify our procedure if these amendments are all considered together. Suppose section 38 were altered. Suppose we omit the clauses of section 37 mentioned in amendment No. (2), and the Hon. Member then suggests a very different control section, the position of Hon. Members will be a very difficult one. It will therefore be far more convenient if the whole of these amendments are treated as involving one large question.

The HON. BABU KALI NATH MITTER said:—I agree with my hon. colleague that it will be very desirable to discuss all these amendments together. If

I succeed in having section 38 substantially altered, the objection to section 37 will be very much minimised. I have therefore not the slightest objection to the course proposed.

HIS HONOUR THE PRESIDENT on that understanding asked the Hon. Babu Kali Nath Mitter to proceed with his next amendment No. (5).

THE HON. BABU KALI NATH MITTER said :—My objection to section 38 of the Bill is this, that when the Act of 1876 was under consideration a similar objection was taken by various public bodies, and thereupon this and some other sections of the Bill were referred back to the Select Committee for further consideration. After a good deal of discussion, after hearing delegates and counsel on behalf of several public bodies, the section which stands in the Act was adopted; and the then Lieutenant-Governor expressed his fullest concurrence in the alteration made by the Select Committee. When the present Bill was laid before the Select Committee in the first instance no change was proposed in the section. It was only at the very last moment that the Hon. Mr. Macaulay thought fit to produce the present section 38 in lieu of the section in Act IV of 1876. The reason assigned by him was, that the provision as it stands in the Act is cumbersome and unworkable. As far as it is cumbersome and unworkable, no doubt it will be necessary to remodel it; but I do not think that because it is cumbersome and unworkable, therefore the law should be materially altered so as to give uncontrolled power in the hands of the Local Government. The powers under the present law are these. In the first place the power is to be exercised only in a few cases, that is in cases where adequate provision is not made for the conservancy and cleaning of the town so as not to secure its healthiness. In the second place if the Commissioners failed to take steps to improve the bustees of Calcutta, and thus to secure the healthiness of the town, then the law authorises the Local Government to step in. But before the Commissioners can be superseded in any way, the present law provides as the most important matter that there should be an independent enquiry, and unless in the course of that enquiry it appears that default has been made within the terms of the law, the Commissioners cannot in any way be superseded. This safeguard does not appear in section 38 of the present Bill. I was told in the Select Committee that due enquiry would mean after hearing the Commissioners. If that is so, why should it not be stated in the law that, before this power is exercised, the Commissioners shall be heard? Again it was said that the wording of the present law makes the provision unworkable. I have, therefore, thought fit to alter the wording of the section, and I am confident that the section, as I have framed it, cannot be said to be unworkable. If there is complaint made, the Commissioners are to be heard, and if the Government is then satisfied that default has been made, there is to be a Commission appointed. The Sanitary Commissioner or any one acting for him is to be one of the arbitrators; the second arbitrator is to be appointed by the Commissioners, and the third by the Local Government; and these three arbitrators are, within a time to be fixed by the Local Government, to find whether any such default as has been complained of has been made. If they find that default has been made, then they are to state what, in their opinion, should be further required to be done in regard to such matter. After the Commission makes its report, the Local Government is entitled to call upon the Commissioners to carry out what the members of the Commission have awarded; and if they fail to do so, the Chairman of the Corporation is to supersede the Commissioners. That is how the section I have framed will practically work; it will substantially leave the law in the same position as at present. No outsider is to supersede the Commissioners; the supersession will be by the Chairman under the special authority of the Local Government, but this supersession would not take place until after a proper inquiry. It is said that such an enquiry will take time. No doubt it will take some time, but time should not be objected to in a matter of this kind. It is entirely in the hands of the Local Government to fix the time within which the report is to be submitted by the Commission. If the complaint is in respect of a matter of very urgent importance, which can be enquired into within two or three days, the Local Government might fix a very short time. If, on the other hand, it is a matter of a complicated nature in which there is no great urgency, the Local Government may fix a longer time for

the members of the Commission to make enquiry and submit its report. Therefore, as far as the objection goes that the procedure is cumbrous and unworkable, I submit that the section framed by me will not be open to that objection. Then, again, I have limited the enquiry to one of the duties enumerated in clauses (3) and (4) and (a) and (b) of clause (5). These are the most important matters. Clause (3) refers to completing and extending the drainage works throughout Calcutta, and the opening out and improving of bustees, and to the expenditure annually of not less than two lakhs of rupees for these purposes. Clause (4) refers to the maintaining of a water-supply; and (a) and (b) of clause (5) to the cleaning and conservancy of Calcutta, and the maintenance and cleaning of drains and drainage works. These are the most important duties which the Commissioners have to perform. They have immediate reference to the health of the town, and in respect of which the Government should have a power of control. As regards clauses (1) and (2), they are so important and so essentially a part and parcel of the working of the Municipal Act that I have not thought it necessary to include them in section 38, because the payment of interest and the establishment of a sinking fund are the first duties of the Corporation. If the Commissioners can be trusted with the administration of the municipal affairs of the town, they should be trusted to make suitable provision for these purposes. I cannot conceive it possible that under any circumstances these duties would not be performed, but if it is thought desirable that they should be included, though the section will then need slight modification, I shall have no objection to offer. I have excluded them simply because they are primary duties, and it is not possible to conceive that under any circumstances these duties would be neglected.

Then as regards other matters, I submit that they are matters of detail which may be left to the Commissioners, subject to the control of public criticism and to the influence which the Press can bring to bear on the Commissioners. I put it to the Council and to Your Honor, whether or not it would be utterly absurd to supersede the Commissioner, because two or three streets had not been named. That, however, is how the section stands. While it is desirable that the Local Government should have this power in matters of vast importance, I think it is desirable that such power should be safeguarded, and the safeguard should be an enquiry by a Commission. The members of the Select Committee, in dealing with this subject, say in the first page of their report, chapter II:—

"Section 37 enumerates the duties of the Corporation. This section has been enlarged to include all that should be included as the duties of the Commissioners, and section 38 confers ample powers on the Local Government to compel the Corporation to discharge any of these duties should it neglect to do so. We could not recommend the re-enactment of the cumbrous and unworkable sections of the former law. On the other hand, the discretion and forbearance of the Government constitute the best guarantee which can be given to the Corporation against a hasty and injudicious use of this power. We have introduced an appeal as of right to the Government of India."

Though I look upon this right of appeal as a concession to my objections, yet I am not satisfied with the section as it has been framed by the Select Committee; and I think it is necessary that there should be material alterations made in it to show the public that since the passing of the Act in 1876 nothing has happened which would justify an alteration of the law on the subject. Within ten or eleven years it was only once that the Local Government thought fit to have recourse to this section. I do not wish, for obvious reasons, to enter into that discussion further than to show that all the recommendations of the Commission were altogether accepted by the Commissioners, and they gave effect to them so far as the Government requested them to do so, not putting their request under the provisions of the law, but appealing to the good sense of the Commissioners. I believe the hon. member in charge of the Bill will bear me out in saying that every one of those recommendations has been attended to. Suppose the law then stood as it is now proposed to make it, what would have been the consequence? I think the consequence would have been the supersession of the Commissioners, and then a grievous mistake would have been committed. As regards matters of vast importance, of course the Local Government should have a power of control; but while conceding this control there should be the safeguard of an independent enquiry. In 1876, and also upon the present Commission, it has been said that this power exists in England and in Bombay. As regards England, the cases are totally different. There the Government does



not appoint a single Town Councillor, but all of them are elected by the rate-payers, and the Chairman is elected by themselves; so that in every sense local bodies there are wholly independent of Government control, and moreover all large municipalities, as far as I have been able to ascertain, are represented in Parliament, and that of itself is a safeguard against the capricious action of Government. I appeal to the Council and to Your Honour to say whether it is likely the town will suffer in the least by adopting the section I propose. If the town will not suffer, I think it will be an act of grace towards the Commissioners and the rate-payers not to alter the law so materially as is proposed. On this subject both the British Indian Association and the Indian Association have made representations. The British Indian Association in their letter says—

“The controlling power of the Government is proposed to be made more summary than at present. The exercise of such summary power would not only be inexpedient in the face of the very reasonable provision at present existing, but unjust to the Commissioners, who ought to be heard in their defence. The Local Government may, after considering such explanations as the Commissioners may offer, appoint a Commission, as in section 28 of the present Act. Such a Commission, if properly constituted, would form a proper bench to judge of the issues between the persons complaining of default by the Commissioners on the one hand, and the Commissioners on the other. After our experience of the last Commission, it is necessary that the Government should specify in detail the work or works neglected, and the exact amount of work to be done. The danger of a special officer, spending money without limit on any particular work, may so cripple the municipality as to lead to the neglect of more pressing work in other directions. The resources are not unlimited, and the expenditure should be regulated according to income.”

And the representation of the Indian Association have also made similar observation. After comparing the provisions of the existing law with the section in the Bill, they say—

“It will be seen at once that the powers of control claimed under the new Bill are far more summary in their operation than what is provided for in the existing law. Under the present law, the Government cannot take any action except as the result of a public enquiry. Under the Bill no public enquiry need be made. If the Government is satisfied that default has been made—it does not matter by what process—the Municipality may at once be coerced to carry out the orders of Government. But the fact remains that the powers of control reserved to the Government by the existing law have been found by actual experience to be amply sufficient for all purposes.”

With these observations I leave the matter in the hands of the Council. I think this is a matter which demands our earnest attention, and I hope that the Council will accept the amendment proposed by me.

The HON. DR. GOOROO DAS BANERJEE said :—I beg to move that in section 38, line 5, after the word “duties” the words “relating to public health” be inserted. I also move that in line 7 of the same section, after the word “enquiry” the words “by a Commission consisting of three persons, two of whom shall be appointed by the Local Government, and one by the Commissioners in meeting” be inserted. The object of these amendments is of a nature similar to that which my hon. colleague who has just sat down has in view in proposing his amendments. The only difference between his amendment and mine consists in this, that whereas he would revert to the old law with very slight modifications, my amendments take a middle course between the old law and the provision contained in the Bill. I fully admit the necessity of the Government having control, but I submit that this control, in the case of an important public body like the Calcutta Municipal Corporation, should be limited to extreme cases—to the cases of serious neglect of duty by the Corporation in relation to matters of public health. It is then only that the grave importance of the subject would justify the action of the Government. In other matters of minor importance, the Municipal Corporation could be safely trusted. But if the provisions of the law remain as they are in the Bill, the result will be that the Commissioners would be liable to be superseded on account of default in the discharge of every minor duty, such as the naming or the watering of streets. This would no doubt very prejudicially affect the independence of the Corporation, a result which is scarcely desirable. Then it should be borne in mind that the new Corporation, with their limited funds, and with the comprehensive and detailed scheme of duties laid down in section 37 of the Bill, would be constantly exposed to the risk of being proceeded against under this section unless its operation is limited



in the way I suggest; and this danger will be all the greater when it is further borne in mind that the amalgamation of the large suburban area with the town will increase their responsibilities a great deal without providing them with adequate funds to discharge those responsibilities. Therefore, I submit, that the first of the two amendments I propose ought to be accepted by the Council.

Then as regards the second amendment, it is quite true, as the Select Committee observe in their report, that the discretion and forbearance of the Government constitute the best guarantee that can be afforded against any unnecessary or arbitrary exercise of the power; but, I submit that it is equally true, in the case of an important public body like the Calcutta Corporation, that their own good sense and the control of public opinion will be sufficient in all ordinary cases to induce them to perform their duties. And if it is thought necessary to guard against neglect of duty by the Corporation in important cases by legislative enactment, I submit it is at least desirable, if not necessary, to make some provision in the same law against any hasty or injudicious exercise of the power of control in any case. And this necessity will appear most clearly when it is remembered that the Corporation, with their limited funds and almost unlimited responsibility, will always have to choose between two evils. They will always be obliged to neglect, for a time at least, duties of a less urgent nature in order to discharge others of a more pressing character. With regard to a public body so circumstanced the duty of judging of their acts and omissions must necessarily be of a most difficult and delicate nature, and therefore I submit it is due as well to the Corporation as to the controlling authority itself to lay down rules and to make careful provision against any unfair or injudicious interference being made in any possible case. There are many cases in which the question involved will after all be a mere matter of difference of opinion; the Commissioners after exercising their judgment most carefully and anxiously may think one class of duties more important than another, whilst the Local Government may be inclined to take a different view. And the possibility of the Commissioners being able to discharge both duties together will depend on the state of their funds. An enquiry into these points can hardly be fairly conducted unless the Commissioners are represented by some one in the tribunal which is to judge. I therefore submit that the very least which ought to be done in this direction will be to have an enquiry by a Commission constituted as my amendment indicates. I earnestly hope that if the Council has any difficulty in accepting the larger proposition contained in the amendment of my hon. friend Babu Kali Nath Mitter, it, at any rate, will find no difficulty in accepting the smaller measure proposed in my amendment.

The HON. SIR HENRY HARRISON said—Although I am quite prepared to admit that the question is not without difficulties, I can hardly recommend the Council to accept the amendments moved by the Hon. Member on my left (Babu Kali Nath Mitter). As regards the fact that section 37 in its earlier form did not contain the clauses to which the Hon. Member has referred, I may mention that in the first instance the Government of India drew attention to the non-inclusion in the section of such provisions. In a letter, received from the Government of India last year, commenting on the draft Bill, they asked us to look into the corresponding sections in the Acts relating to Municipalities in other parts of India, and it is not possible to deny that the maintaining of a system of registration of births and deaths for instance, or the naming of streets and the numbering of houses are duties of the Municipality. Then, if it is the duty of the Municipality to do these things, ought they to be omitted from the section of the Bill, over the operation of which a power of control is given to the Government? I admit that for all practical purposes it will perhaps be sufficient if the power of control is confined to matters affecting the public health, because it is essentially in such matters that there will be a probability of difference of opinion. But as a question of principle, why should the other clauses of the section be excluded? The probability is that there will be no likelihood of default in such matters. But suppose the Commissioners were to commit default in respect of such matters. Suppose the Commissioners discontinued the maintenance of a system of registration of births and deaths. There

are statistics of births and deaths extending over a series of years of extreme value to which constant reference is needed. Would it not then be necessary that the Government should have power to say to the Commissioners, you shall not discontinue those registers? Take another case. Take the naming of streets and the numbering of houses. Conceive the total confusion which would result from total neglect of this duty. Consider the total prostration of the Postal Department and of all inter-communication in Calcutta. Is there one single duty of the Commissioners regarding the performance of which it would be more incumbent on the Government to interfere than that supposing it neglected? As a question of principle I cannot see why we should take away the control of the Government over duties of this kind which, supposing they are not performed, will lead to disastrous results, simply because we think there will be no necessity for such control. The chances are a hundred to one that the Commissioners would not commit default in such matters; if so, no harm would be done, and the section would remain a dead letter. But suppose the Commissioners did commit general default, then there is no single matter amongst the duties of the Corporation control over which would more meet with the approval of the entire population, than some of the matters which I have instanced. I think the essence of the objection is that instead of the decision in such matters being vested in the Government it should be vested in a tribunal consisting of three persons, two of whom should be appointed by the Local Government and one by the Commissioners in meeting. That is a legacy from the Act of 1876, and the Hon. Babu Kali Nath Mitter correctly described what happened then. The section was adopted as a compromise by way of concession to representations made by various public bodies, because they considered that the general power of control proposed to be given would prove fatal to the independence of the Commissioners. But I would ask the Council to consider whether that is not a fundamentally erroneous principle. It appears to me to be an erroneous principle incautiously and easily yielded by Sir Richard Temple to satisfy the objections raised by several public bodies. And now that the law is being amended, I am bound to say that in my opinion the Council will do wrong, unless it lays down most distinctly that the authority in all such matters rests with the Government. There is a great deal of difference between the Government interfering in matters concerning the duties of a Municipality and in matters affecting private rights, in which case the decision of a perfectly independent tribunal is necessary. There is a wide difference between such rights and rights and duties which are really part of the work of Government. The Municipality is a body vested with some of the authority of the Government of the country, and it should be properly regarded as a body which is subordinate to the Government of the country, and so it is regarded in every country in the world. In Paris, in Berlin, in London, the Government of the country is vested with the supreme authority and the supreme responsibility of disposing of public duties, but as it cannot attend to everything itself, it has its subordinate officers, and, where it is possible, local bodies are constituted for local purposes. But who in the long run is responsible to the individuals of each community against gross abuse of authority, but the Government of the country. Therefore, I submit, that as a matter of Government we must have a hierarchy of institutions, and subordinate authorities must be placed under superior authority. The Government ought to make up its mind with the utmost care, prudence, discretion, and forbearance; but when the Government has made up its mind that something is wrong, it is erroneous in principle to say that it should not have power then and there to act, but that authority should be given to some other tribunal to judge between it and the subordinate authority. That is the principle on which this section is based. Therefore on the whole I submit that the proper principle is that the responsible authority must be given the power after it has given full consideration to the matter and has made up its mind. And that being so, may we not fairly appeal to the experience of all other parts of the world? Can the Hon. Member point to any provision such as exists in the Act of 1876? In France, there can be no question that Municipalities are absolutely and entirely under the control of the Government: the President of the Republic has

complete power over municipalities. In Paris, it is entirely under the Prefect of the Seine and the Prefect of Police. And a similar rule prevails everywhere. In Bombay, a precisely parallel case, where a portion of the members of the Corporation are appointed by the Government, we have the same principle; and in Madras it is the same. In India, that appears to me to be the legitimate and proper position which the Government must exercise. On the other hand, it seems desirable that that principle once safeguarded, the Government should make every concession it can, consistently with the working of the principle, to the position of the Corporation. On that ground we are much indebted to Your Honor that the Corporation should, under such circumstances, have been given a right of appeal. That right can no doubt be granted without any serious incumbrance to the exercise of the authority. It is in itself a very moderate safeguard. The Hon. Member asked why it should not be incumbent on the Government in the first instance to call for an explanation from the Commissioners. But by a concession of the kind offered by Your Honor, you practically concede what is asked. I know that there is a strong feeling in many quarters that in doing that the Government has made an unnecessary concession, and it is perfectly possible that if that view had been pressed on the Council, a majority might have been found to agree with it; and that makes us all the more indebted to you for making the concession, and it is the utmost concession which Your Honor can make consistently with principle, Your Honor being the responsible authority.

One more argument before I sit down. It is but fair to point out that a very great change has taken place, or, I should rather say, the experience of past years has made a great change in the aspect which this question now presents. If I read to the Council from a speech delivered by the late Hon. Kristo Das Pal when he objected to a similar provision which was first proposed, it will be apparent that what he made the primary objection to the principle no longer exists. He said—

“This was the last straw which broke the camel's back. If this section passed, he would rather set his face against an elected system than vote for it in this form. The section gave power to the Local Government to modify or cancel rates which might be fixed by the Municipal Commissioners after full and mature deliberation. So long as this section should remain a part of the statute book, he did not know whether any independent gentlemen, with any feeling of self-respect, would care or would be willing to work for an object which would be likely to be set at naught at the pleasure of the Government. The other day the Justices, after days of labour and discussion came to the decision, that a 7½ per cent house-rate would be sufficient for the year. The Chairman was not of course satisfied with that decision, and, as under the present law, the Government had no power to alter the rates, the Chairman was bound to accept the decision of the Justices so long as they saw no reason to alter it. But if the Government had power under the existing law in the way proposed in this section, then the Chairman might have at once gone up to Government, and the rate passed might have been cancelled. It might be urged that Government would not unnecessarily exercise that power. But at the same time Babu Kristo Das Pal submitted, with due deference to the Government that it would be chiefly inspired or guided by the Chairman in a matter like this. Government could not be expected to be master of those details which the Chairman, it was thought, ought to be; and in such a matter the Government would necessarily be guided by the Chairman. With every deference to his hon. friend who now so ably filled the office of Chairman to the Justices, he submitted that the tendency of the executive had always been to expend money, and that tendency it had been the business of the working Justices to control.

“That, he submitted, was a healthy policy. He thought such a state of things was good for the town. Good, because the Chairman, as the executive officer, might be anxious to undertake works of improvement which might be desirable to carry out, and good, because there was an independent body of working Justices to temper the excessive zeal of the Chairman, and their conduct in this way helped to preserve the much-needed equilibrium. But once that power was destroyed or lost, it would come to this, that the Chairman, however reasonably he might be overruled by the Commissioners, would have only to appeal to the Government, and, as the representative of the Government, he would in nine cases out of ten be likely to be supported by it. Such being the tendency of this section, he was sorry he could not support it, and he was compelled to say that, if it were carried, it would defeat the very object for which His Honor so laudably sought.”

The whole gist of his objection was that the Chairman would be constantly rushing up to the Government to appeal against the Commissioners. Has not experience shown that that is quite contrary to the spirit in which the Act has worked? Does not the Chairman recognize that his interest and the interest of the Corporation are the same; that his success is their success and that

their success is his success? And so long as that is the spirit which guides the Corporation, I do not think there is any reasonable fear of the Chairman going up to Government; of any constant appeal to Government from within the Corporation. That was the only way in which the late Hon. Kristo Das Pal thought the principle of the section originally proposed was unwise; but as far as the outside public was concerned, he admitted that if, say, 500 rate-payers petitioned the Government, the section should be brought into operation.

For all these reasons, I think it will be fittest for the Council not to accept the amendment, and to be satisfied that the Corporation will always have a right of appeal to the Government of India.

The HON. BABU KALI NATH MITTER in reply said:—I have listened very attentively to what has fallen from the hon. member in charge of the Bill, but I fail to see how he has attempted to meet the objections I have raised to the section. He has made general statements which an advocate will always make when he has a bad case to deal with, but he has not attempted to meet the objections which I raised. All throughout he has made general statements. As to the quotation from the speech of the late Hon. Kristo Das Pal, I submit that everything he then said applies in every possible way to the present time. Suppose this section is not altered, but is passed as it has been framed, will the relations between the Chairman and the Corporation be of the same character as they have been in the past? I think if the law was different, the Chairman would on many occasions have gone up to the Government; the Act has worked well, because the law insisted upon an enquiry. We have no experience of what would have happened if the law had been different; our past experience, therefore, does not help us. The late Hon. Kristo Das Pal put it on that ground alone. I did not put it on that ground. I never referred to the possibility of the Chairman being the person who would be the complainant: that is a matter wholly immaterial to my argument. We are asked why the Government should not interfere if the Commissioners omitted to register births and deaths or to name streets and number premises. If that happened, the interference of Government should be very different. It should not be supersession by the appointment of a person to register births and deaths or to name streets or number premises, but the interference would take the form of establishing a totally different system of Municipal Government. It is possible to conceive that the Commissioners should fail to provide for the performance of these obvious duties, then the course would be not to supersede the Commissioners in the manner indicated in the Bill, but to supersede them completely, and to have another system for the administration of the affairs of the town. To my mind the two things are as totally distinct as it is possible to conceive, but I do not think it is possible any such thing can happen. I am told that if it is not possible to happen, what objection is there? I object to this provision on principle; that it is a provision which should not be left without reasonable safeguards. Then I am referred to the words "general default." The expression "general default" has not been defined in the Bill, and I do not know what it means; whether the omission to name two or three streets or a hundred streets would be considered "general default." It would be very difficult to say how a court of law would interpret this "expression," or how the Local Government would interpret it. Then my hon. friend has thought fit to say that on the last occasion when this question was considered it was decided on an erroneous principle. I have listened very attentively to find where the principle lies, but I have failed to find any principle involved in it. My hon. friend says that if such default is committed, who is the person who should take action but the Local Government? My answer is that it will be impossible for the Local Government, constituted as it is, to have any opinion on the subject, unless it causes a proper enquiry to be made by an independent person or tribunal. When a memorial signed by 500 or 1,000 persons is submitted to the Government, it is *prima facie* evidence that the complaint is a just one, and no reasonable man can object to the exercise of this power in such a case; but if the complaint is to be enquired into in the mode indicated in the law, and if, as the result of that enquiry, the Local Government is to exercise the power, then I do not see where the principle suffers. It is not to be an enquiry made by a Secretary to Government or some

other Government official; but by independent persons, assisted by a nominee of the Commissioners, so that the nominee of the Commissioners will be able to place before his colleagues the fullest information on which it would be possible for the Commissioners to come to a finding. Therefore I humbly submit that there is no question of principle involved in the section. My hon. friend has asked me to show whether there is in England or elsewhere, or in this country, any such provision of law as that contained in Act IV of 1876 or in my amendment. I say there is not, and it is because Calcutta is differently circumstanced from other towns that it was thought fit to make this provision. May I not retort and ask whether the hon. member can point to any case where an appeal to the Government of India from the decision of the Local Government has been allowed? If he cannot, then does not that show conclusively that the circumstances of the case are different, and that therefore a different procedure is applicable. I would also urge that as this appeal is to be allowed, the order must be made after the Commissioners have been heard. Where is the objection to provide for such hearing? If that is the intention of the section, why not plainly say so? Where is the objection to state plainly what the law intends, and to say so plainly if that is the intention? We know as a fact that on the occasion to which I have referred, the Commissioners were not heard before they were condemned; and therefore I am extremely anxious that it should be stated plainly, so that there should not be the slightest doubt on the subject. Under these circumstances, I hope that notwithstanding the opposition of my hon. friend, Your Honor, as President of the Council, will see your way to support these amendments. One thing more I have to say. If my hon. friend, the member in charge of the Bill, is so much struck with the erroneous principle of this section of the existing Bill, why was not the amending section proposed by him when he introduced the Bill? It was not proposed by him, but it was brought forward by the hon. Mr. Macaulay at the very last moment. It is a matter of surprise that the hon. member in charge of the Bill, who is so much struck with the erroneous principle of the existing law, never brought forward any amendment of it.

The HON. DR. GOOROO DASS BANERJEE said in reply—The Hon. Member in charge of the Bill has been pleased to point out the necessity for retaining the section in the general terms in which it stands, on the ground that although general default in the performance of their duties by the Corporation may not be a very probable thing, yet it is possible, and that when such a possibility happens, there will be good reason for the interference of Government. I have not had the honour of being a member of the Corporation, and it is therefore not for me to say what default by the Corporation is possible and what is not possible; but we have the word of the Hon. Member himself that it is not very probable that such default will be made. If that is so, where is the necessity to provide for a mere possible contingency which may after all never happen? I should have thought that the work of providing for probable contingencies is work enough for us. Then as to the question of enquiry, it has been said that it involves an erroneous principle, and the hon. member in charge of the Bill entered into a discussion on the general question as to whether the functions of the Municipality are functions delegated by the Government or are independent functions. I do not think it necessary to enter into a discussion as to whether the Municipality is an independent body and entitled to have any question in dispute between it and the Government decided by an independent tribunal. I concede to the fullest extent the correctness of the principle laid down by the hon. member in charge of the Bill, but I must say the hon. member has been labouring under a misapprehension. When I addressed the Council, I did not say that any of the powers of the Local Government to judge are to be curtailed in any way. I think I said, with some degree of distinctness, that I wanted the Corporation to be represented by some one on their behalf as an assessor, in order that the controlling authority, the Local Government, may be in full possession of the facts and details into which it would be necessary to enter to enable the Government to come to a right decision. I do not think that would infringe any principle of law or justice. My amendment concedes that the Local Government shall have



the right to judge; all I say is that it will be assisted very materially if it has before it the report of a Commission consisting, amongst others, of one member at least who has been nominated by the Commissioners.

The HON. BABU KALI NATH MITTER's motion that (c), (d), (e), (f), (g), (h), (i), (j) and (k) of clause (5) and clause (6) of section 37, be omitted, was put to the vote and negatived.

The HON. DR. GOOROO DASS BANERJEE's motion that in line 5 of section 38, after the word "duties" the words "relating to public health" be inserted, being put, the Council divided:—

*Ayes 4.*

The Hon. H. Pratt.  
The Hon. Dr. Gooroo Dass Banerjee.  
The Hon. Dr. Mahendra Lal Sircar.  
The Hon. Babu Kali Nath Mitter.

*Noes 7.*

The Hon. C. H. Moore.  
The Hon. Moulvie Abdul Jubbar.  
The Hon. Sir Alfred Croft.  
The Hon. Sir Henry Harrison.  
The Hon. T. T. Allen.  
The Hon. C. P. L. Macaulay.  
The Hon. H. J. Reynolds.

So the Motion was negatived.

The HON. DR. GOOROO DASS BANERJEE's motion that in line 7 of section 38, after the word "enquiry" the words "by a Commission consisting of three persons, two of whom shall be appointed by the Local Government, and one by the Commissioners in meeting," be inserted, being put, the Council divided:—

*Ayes 3.*

The Hon. Dr. Gooroo Dass Banerjee.  
The Hon. Dr. Mahendra Lal Sircar.  
The Hon. Babu Kali Nath Mitter.

*Noes 9.*

The Hon. H. Pratt.  
The Hon. C. H. Moore.  
The Hon. Moulvie Abdul Jubbar.  
The Hon. Sir Alfred Croft.  
The Hon. Sir Henry Harrison.  
The Hon. T. T. Allen.  
The Hon. C. P. L. Macaulay.  
The Hon. H. J. Reynolds.  
His Honour the President.

So the Motion was negatived.

The HON. BABU KALI NATH MITTER's motion that, for section 38, the following be substituted, being put, the Council divided:—

"Upon complaint made to the Local Government that the Commissioners have made general default in the performance of any of the duties enumerated in clauses (3) and (4), and in (a) and (b) of clause (5), the Local Government, may, by notification in the *Calcutta Gazette*, appoint a Commission, consisting of three persons, of whom one shall be the Sanitary Commissioner for Bengal or any Medical Officer officiating for him, the second shall be appointed by the Commissioners in meeting within a fortnight from the date of the said notification, or in their default by the Local Government, and the third by the Local Government. And the Local Government shall order the members of the said Commission to report within a certain time to be fixed by the Local Government whether they are of opinion that any such general default has been made, and in that case to specify in their report what further provision should be made towards the performance of any of the duties in respect of which such default has been made, and to submit an estimate of the cost of the said further provision."

*Ayes 4.*

The Hon. H. Pratt.  
The Hon. Dr. Gooroo Dass Banerjee.  
The Hon. Dr. Mahendra Lal Sircar.  
The Hon. Babu Kali Nath Mitter.

*Noes 8.*

The Hon. C. H. Moore.  
The Hon. Moulvie Abdul Jubbar.  
The Hon. Sir Alfred Croft.  
The Hon. Sir Henry Harrison.  
The Hon. T. T. Allen.  
The Hon. C. P. L. Macaulay.  
The Hon. H. J. Reynolds.  
His Honour the President.

So the Motion was negatived.

The HON. BABU KALI NATH MITTER, by leave, withdrew the motion that after section 38, the following new section be inserted:—

"38A. On receipt of the said report, the Local Government shall forward the same for the consideration of the Commissioners; and if the Commissioners shall decline to carry out the provisions recommended therein, the Local Government may order that such

provisions, or any of them, or any portion of them, respectively, be carried out; and thereupon it shall be the duty of the Commissioners to comply with such orders, and to provide the funds mentioned in the said estimate or such portion thereof as the Local Government may fix; and the Chairman shall forthwith carry out such order and shall defray the cost of carrying out the same from the Municipal Fund, notwithstanding any power conferred on the Commissioners by section sixty-one or anything to the contrary contained in any other provision of this Act:

Provided that if there is a difference of opinion among the members of the said Commission, the opinion and report of the majority of the said members shall be held to be the opinion and report of the Commission."

The HON. BABU KALI NATH MITTER moved that, for the first paragraph of section 39, the following be substituted:—

"The Commissioners at a special meeting to be held for that purpose may, from time to time, nominate a proper and fit person residing within the limits of Calcutta to be appointed by the Local Government as the Chairman of the Commissioners."

He said:—Under the present Municipal Law of Bengal many municipalities have been entrusted with the duty of appointing their own Chairman, and of late this concession has been extended even to some of the minor municipalities. I fail to see why the Calcutta Municipality should not have some voice in the appointment of their Chairman. The policy of the law, as laid down in this Bill and in the existing Act, seems to be as if it was intended that the Commissioners should have some voice in the matter; for we find that in the appointment of officers on a salary not exceeding Rs. 200 per mensem, the Chairman of the Corporation has uncontrolled power. Then, as regards appointments between Rs. 200 and Rs. 500, he is to make nominations to the Commissioners, and the Commissioners are to appoint one of the persons so nominated by the Chairman; and in regard to appointments of Rs. 500 a month and upwards, the Commissioners have the absolute power of appointment subject to the approval of the Local Government. But there is one appointment as to which the Commissioners do not seem to have any power whatsoever. I fail to understand why that should be so. If they are competent to appoint all the superior officers of the Municipality, subject to the sanction of the Local Government, surely they ought to be allowed to have the privilege of nominating a person to be their Chairman. It seems to me that the Commissioners are in an excellent position to make such a nomination. So far as the appointments hitherto made by the Government of Chairmen of the Corporation are concerned, I believe they have given satisfaction generally. There was only one case in which satisfaction was not given, but with that exception the appointments made by the Government generally gave satisfaction. But I claim on principle that the Commissioners should have some voice in the appointment of their Chairman. If it be considered that the amendment proposed by me goes too far, I shall be quite content to make a modified proposal. In the same way as the Chairman is required to submit three names to the Commissioners in respect of appointments between Rs. 200 and Rs. 500 a month, the Commissioners might be authorised to send up to Government three names, out of which the selection should be made for the appointment of Chairman of the Corporation. If that proposal is approved, I shall have no objection to modify my amendment. My object is simply that the views of the Commissioners should be considered, and that the Government should make the appointment after the Commissioners have made their nominations.

The HON. MR. MACAULAY said:—I regret that my hon. friend in charge of the Bill leaves it to me to oppose the amendment. I do so on two grounds. First, I think that my hon. friend has proceeded on a wrong line in suggesting that the appointment of the Chairman is in any way of the same character as other officers of the Corporation. He has, I think, overlooked the provisions of section 31 of the Bill, under which the Chairman may exercise all the powers of the Commissioners. That removes the appointment from the same category as the subordinate officers of the Corporation. Beyond that we have to regard Calcutta in a different light from other municipalities in Bengal. No one would be more ready than myself to see the principle of Local Self-Government extended as far as possible, and I fully admit that the nomination to the office of Chairman is a proper development of that principle, and that this power should be given to the Commissioners of Municipalities where it can be given safely

But I draw a serious distinction between Calcutta and Municipalities in the interior. It must be remembered that in Mofussil Municipalities the Commissioners are concerned in managing their own affairs. In Calcutta the Commissioners are, to a great extent, managing the affairs of people in all parts of the world who are concerned in the welfare of the town as it affects commerce, though they have never been and may never be in Calcutta. We must look upon Calcutta as the capital of a great Empire, and, as such, we should secure as far as we possibly can its good Municipal Government.

The Hon. Sir HENRY HARRISON said:—I was in no way unwilling to oppose this amendment myself; but as I was convinced that my hon. friend, Mr. Macaulay, would do so much more forcibly and eloquently than I could, I asked him to reply to the observations of the hon. mover of the amendment. Nevertheless I will add a few words, and in doing so I would draw attention to the difference between Calcutta and the homogeneous municipalities in the mofussil. In Calcutta the main difficulty lies in this—that there are people of different classes, different races, different nationalities and different religions, all of whose affairs have to be managed impartially and equitably by the Municipality. Looking at it in that light, is it desirable that the Chairman should be nominated by the Commissioners? The problem is an extremely complex one, and might well lead one to suppose that nothing short of administration by an officer of Government would satisfy all parties. It is of the utmost importance that any tendency to special national and race sympathies should be kept out of the Municipality. For this reason it seems most unwise that the appointment of Chairman should be thrown into the cauldron of Municipal contests as a prize to be carried off by the strongest party. The Chairman of the Municipality should be of no party, so that he may deal with all parties on an equality. If you make him the nominee of one particular party, would you not bring about the very thing you wish as much as possible to prevent? He would simply be the nominee of the majority, and the more completely he would be in harmony with the views and feelings of the majority, the more effectually would he work in the very way he should not work: any Chairman who would be completely in harmony with one party would be as completely antagonistic to the others. On the other hand, the Local Government, which is extremely interested in the welfare of all parties, and which has the best means of judging between them, should be the authority to select a fit person for the appointment. The Hon. Member has himself borne testimony to the success of the present mode of appointing the Chairman during the last ten years. Could they do better than let well alone?

THE Hon. BABU KALI NATH MITTER said in reply:—My own experience is that the Chairman has always belonged to one of the parties in the Corporation, and the members of the opposition to the other; so that there have been two parties, the Chairman and his followers, and the members of the opposition. It is a mistake to say that the Chairman is wholly independent of parties, because it cannot be so. He has to work by majorities. I think the very reasons he has assigned strongly support my contention. Many municipalities have been entrusted with this privilege, and surely the metropolis of the Empire can be trusted with it. We have not got any experience of nominations by the Commissioners; but in one or two instances in which the Government accepted the views of the Commissioners, the appointment gave complete satisfaction. In every instance, as the hon. member in charge of the Bill said, there would be competition, and the Chairman would side with the party which elected him; but it is very difficult to say whether in practice it would so happen. I can, however, conceive it to be quite possible for the nomination to be made without canvassing. If my hon. friend desires to restrict the appointment to the members of the Civil Service, he is right in what he said; but if the appointment is to be thrown open to other persons, then the nomination should be left to the Commissioners. It may be that the Commissioners would nominate a gentleman who is not a member of the Civil Service, and such person may turn out a success; but without allowing the thing to work, it is difficult to say what would be the result. The ultimate power would rest with the Local Government to accept the nomination of the Commissioners; and, with this



safeguard, I do not see why this privilege should not be granted to the Corporation. I think the Commissioners have shown that they are persons who ought to be trusted.

The motion was put to the vote and negatived.

The HON. SIR HENRY HARRISON moved that in line 7 of section 41 for the words "Collector of Taxes" the word "Collector" be substituted.

He said:—The term "Collector of Taxes" was a misnomer. The Act distinguishes between rates and taxes. Taxes are imposed on trades and professions, and rates are levied from the community at large. As a matter of fact, the Collector is the Collector of Rates, and not the Collector of Taxes; the latter being collected by the officers of the License Department.

The motion was put to the vote and carried.

The further consideration of the clauses of the Bill was postponed to the next sitting of the Council.

#### BENGAL MUNICIPAL ACT, 1884, AMENDMENT BILL.

The HON. MR. MACAULAY moved for leave to introduce a Bill to amend the Bengal Municipal Act, III of 1884. In doing so, he said:—This is a measure to which Your Honour made reference in your opening Address. But I may inform the Council that since that address was delivered, some correspondence had taken place between the Government of India and the Local Government, with the result that the scope of the Bill will be much more limited than was originally proposed. It was originally suggested that the Government of Bengal should have the same power as other Local Governments in India under their respective Municipal Acts, without referring to the Commissioners of a Municipality, to exclude from its limits any lands or buildings in the occupation of the State for State purposes. The Lieutenant-Governor, however, represented that as the law stood any change of limits would require the sanction of the Commissioners of the Municipality, we have practically to guard against two dangers; undue assessment and undue interference. As regards undue assessment it was considered that the interests of the State were sufficiently protected by the Imperial Municipal Taxation Act, XI of 1881; and as regards protecting State property from undue interference, it was believed that it might be effected by restricting the power of the Government with regard to altering the limits of Municipalities to lands and buildings belonging to the State of a particular character. In this view the Government of India concurred. The Council are aware that the necessity for legislation arose out of the proceedings of the North Barrackpore Municipality. The Commissioners of that Municipality claimed the right to enter upon and to inspect the premises of the Gunpowder Manufactory, and the Superintendent of that Manufactory represented—and it was a reasonable representation—that that was a power which could not ordinarily be exercised without risk to the very delicate and dangerous operations under his control. The Commissioners, however, had the power, and so long as the Act remained in force, and the manufactory was within their Municipality, they were entitled to exercise that power. The only way out of the difficulty was to alter the limits of the Municipality so as to exclude this magazine from the municipal limits. The Commissioners declined to give their assent to this proposal, and we now ask the Council to amend the Act so as to give the Government power to do so without the consent of the Commissioners of the Municipality. It has been considered that cases of this kind will be sufficiently met if section 9 of the Act be amended so as to give the Government power to exclude from municipal limits any land or buildings in the occupation of the State for military or for naval purposes. With that object, I ask leave to introduce a Bill.

The motion was put to the vote and carried.

The Council was adjourned to Saturday, the 7th April, 1888.

C. H. REILY,

*Assistant Secretary to the Govt. of Bengal,  
Legislative Department.*

## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the crops in the different districts of Bengal, as reported to Government during the week ending the 14th April 1888.

No.	District and date of return	Rainfall at Bulwer Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
<i>Western Districts.</i>			
<b>RHOWAR DIV.</b>	1 Burdwan Apl. 14, '88	Nil	Weather—extremely hot. Prospects of crops favourable. Rain is now wanted. Price of common rice has fallen to a little over 22 seers per rapae.
	2 Bankura „ 14, '88	Nil	Weather—seasonable, strong westerly wind in the day. Prospects of indigo, cotton, boro, and til good. Planting of sugarcane proceeds. Prices stationary.
	3 Beerbhoom „ 14, '88	Nil	Weather—hot. State and prospects of crops good.
	4 Midnapur „ 14, '88	Nil	Weather—hot; cool wind in evening. Boro crop is commencing to be reaped, and promises well. Rain is required.
	5 Hooghly „ 14, '88	Nil	Weather—abnormally hot. Prospects of crops not so good as in last week, owing to excessive heat and want of rain.
	Howrah „ 16, '88	Nil	South winds. Boro does doing well.
<i>Central Districts.</i>			
<b>PRESIDENCY DIV.</b>	6 24-Parghe. Apl. 17, '88	Nil	Weather—very hot with high winds and cool nights. No crops on the ground except sugarcane, which is doing well. Lands are still being tilled for rice crops.
	7 Nuddea „ 14, '88	Nil	Weather.—Days exceedingly hot with sultry evenings and pleasant cool mornings. Tillage for early rice in good progress. Indigo doing well. Rain much wanted.
	8 Khoulna „ 14, '88	Nil	Weather—sultry. Boro rice promises well. Rain urgently needed for ploughing. The spread of cholera, fever, and cattle-disease is so serious as likely to effect agricultural operations.
	9 Jessore „ 14, '88	Nil	Weather—very hot with a good deal of west wind. Rain is wanted for all crops.
	10 Moorshedabad „ 14, '88	Nil	Weather—getting warmer. Sowing of <i>aus</i> paddy going on. Harvesting of <i>rubbi</i> crops over.
<b>RAJSHAH DIV.</b>	11 Dinagepur Apl. 14, '88	Nil	Weather—hot with strong west winds at midday. Jute and <i>bandai</i> are being sown.
	12 Rajshahy „ 14, '88	Nil	Weather—very hot. Rain urgently required for jute, <i>aus</i> , and <i>aman</i> , also for further sowings.
	13 Rangpur „ 14, '88	Nil	Weather—hot with strong west winds. Crops doing fairly, but require rain.
	14 Bogra „ 14, '88	Nil	Weather—very hot in the beginning of the week; cloudy and cooler at the end. State and prospects of crops good.
	15 Pubna „ 14, '88	Nil	Weather—hot. Rain wanted. Prospects of crops good.
	16 Darjeeling „ 14, '88	Nil	Weather—cloudy, no rain. Rain much wanted in the hills. Lands are still being prepared in the Terai. Some jute already sown. Prices steady.
	17 Jalpigora „ 14, '88	Nil	Weather—hot with strong east wind. Early rice has germinated in parts. Rain much wanted. Prices stationary.
<i>Eastern Districts.</i>			
<b>DACCA DIVISION.</b>	18 Dacca Apl. 14, '88	0.42	Weather—hot and windy. A terrific tornado visited Dacca city and Hachail, a village in Munshigunge, on the 7th. Paddy and jute are being sown. Boro paddy thriving. Harvesting of <i>rubbi</i> crops nearly completed. Prospects continue favourable.
	Munshigunge „ „	0.37	
	Munshigunge „ „	0.20	
	19 Farreedpur „ 14, '88	Nil	Weather—hot. Prospects of crops fair, but rain is wanted for jute and early paddy sowings.
	20 Backergunge „ 13, '88	Nil	Weather—rather warm. Rain wanted. Prospects of crops good.
<b>CHITTAGONG DIV.</b>	21 Mymensingh „ 13, '88	Nil	Weather—very hot. Prospects of crops good. Rain wanted for cultivation.
	22 Chittagong Apl. 17, '88	Nil	Weather—variable. Rain much wanted. Prospects of crops fair. Prices stationary.
	23 Noakhally „ 13, '88	Nil	Weather—seasonable. Strong southerly wind. Harvesting of <i>rubbi</i> crops continues. Sowing of <i>aus</i> progressing.
	24 Tipperah „ 13, '88	Nil	Weather—seasonable; some rain would be very beneficial. Whatever standing crops there are, are being reaped with good outturn. Lands are being prepared for rice and jute.
	25 Chittagong Hill Tracts „ 11, '88	0.79	Weather—foggy in the morning, hot till midnight, and cool in the latter part of the night. A shower of rain on the 9th. Joom burning continues. Tobacco, chillies, and other winter crops are being gathered. Planting of sugarcane commenced.
<b>CHITTAGONG DIV.</b>	Hill Tipperah „ 13, '88	Nil	Weather—hot. Early rice is being sown in some parts. Prospects of <i>aus</i> paddy fair.

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BEHAR.</b>			
PATNA DIVN.	Patna	Apr. 14, '88	Nil
	27 Gya	" 14, '88	Nil
	28 Shahabad	" 14, '88	Nil
	29 Durbhanga	" 14, '88	Nil
	30 Mozufferpur	" 14, '88	Nil
	Sarun	" 14, '88	Nil
	Chumpan	" 14, '88	Nil
BAGULPORE DIVN.	Monghyr	Apr. 14, '88	Nil
	34 Bhagulpur	" 14, '88	Nil
	35 Purneah	" 14, '88	Nil
	36 Maldah	" 14, '88	Nil
	37 Sonthal Pergas.	" 14, '88	Nil
<b>ORISSA.</b>			
ORISSA DIVN.	38 Cuttack	Apr. 13, '88	Nil
	39 Pooree	" 12, '88	Nil
	40 Balasore	" 13, '88	Nil
<b>CHOTA NAGPORE.</b>			
<i>South-West Frontier Agency.</i>			
CHOTA NAGPORE DIVN.	41 Hazaribagh.	Apr. 13, '88	Nil
	42 Lohardugga	" 14, '88	Nil
	43 Singbhoon	" 13, '88	Nil
	44 Manbhoom	" 14, '88	Nil

Published for general information.

CALCUTTA, REVENUE DEPT.;  
The 17th April 1883.P. NOLAN.  
Secy. to the Govt. of Bengal

## Meteorological Report of the Province of Bengal

		STATION OBSERVATIONS.														
DISTRICT.		Representative station.	AIR PRESSURE.			WIND.			TEMPERATURE.							
			Mean barometric height, in A.S.	Mean reduced to sea-level.	Variation from month.	Direction direct.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature.	Variation from normal mean of week.	Mean 30 A.M. temperature.
CENTRAL DIVISION.	Pooree	Pooree	29.750	29.800	-.008	SSW	497	492	8th, 10th & 12th Apl.	79.8	10th Apl.	85.8	80.6	83.2	+1.0	84.7
	Pooree	Gopalpur	29.781	29.809	-.003	SSW	377	383	9th ..	77.9	7th, 9th & 10th Apl.	87.9	78.8	82.8	-.1.3	85.7
	Cuttack	Cuttack	29.798	29.784	-.004	SW	101	104.4	9th ..	75.4	7th ..	79.4	74.3	76.8	+2.6	77.2
	Balasore	Balasore	29.733	29.791	-.001	SSW	292.0	141.6	9th ..	74.3	9th & 10th Apl.	88.6	76.7	82.0	+2.4	80.0
SOUTH-WEST DIVISION.	South-West Midnapore	Saugor Island	29.776	29.802	-.005	SSW	535	97.7	10th ..	79.0	10th Apl.	81.0	80.6	80.8	+1.7	80.7
	South-West Midnapore	Midnapore	29.765	29.792	-.004	S	130.7	107.9	15th ..	74.7	10th ..	105.7	76.4	89.0	+2.8	80.0
	Midnapore	Midnapore	29.755	29.773	-.001	SSW	170	100.4	9th ..	72.7	8th & 9th Apl.	90.6	76.8	83.2	+1.3	80.7
	Howrah	Calcutta	29.755	29.773	-.001	SSW	170	100.4	9th ..	72.7	8th & 9th Apl.	90.6	76.8	83.2	+1.3	80.7
SOUTH-EAST DIVISION.	Burdwan	Burdwan	29.761	29.761	-.003	SW	111.2	106.8	13th ..	67.9	9th Apl.	104.2	74.0	89.1	+1.8	80.0
	Bankura	Bankura	29.718	—	—	WNW	140	105.6	13th ..	72.1	10th ..	105.6	76.2	90.4	—	80.0
	Bankura	Bankura	29.718	—	—	SW	100.1	105.5	19th ..	72.1	10th ..	105.5	75.2	90.3	+3.0	80.0
	West Burdwan	Burhanpur	29.630	29.740	-.019	South-Westerly SW	146.9	105.7	13th ..	72.3	9th & 10th Apl.	103.2	76.7	88.9	+2.0	80.0
SOUTH-EAST DIVISION.	Nadua	Krishnaghat	29.674	29.739	—	South-Westerly SW	133.2	104.0	13th ..	69.4	9th Apl.	102.4	74.3	89.4	—	80.0
	Jessore	Jessore	29.741	29.789	-.073	SW	98.6	103.2	10th ..	74.2	10th ..	101.0	77.6	80.6	+3.6	80.0
	Khoocha	Chittagong	29.767	29.857	-.037	S & SSW	295.8	83.6	11th & 13th Apl.	74.0	8th ..	87.8	72.8	81.8	+0.7	80.0
	Chittagong Hill Tracts	Dumturi	—	—	—	Observations not received.	—	—	—	—	—	—	—	—	—	—
SOUTH-EAST DIVISION.	Berhampur	Berhampur	29.722	29.794	-.043	S	168.7	105.8	9th ..	73.9	10th ..	92.3	76.0	84.7	+3.4	80.0
	Noakhali	Noakhali	29.721	29.825	-.020	SSW	157.2	91.7	10th ..	73.8	9th ..	88.8	77.7	85.3	+3.1	80.0
	Furzedpore	Furzedpore	29.722	29.811	-.018	South-Westerly	212	105.5	9th ..	69.0	10th ..	94.2	73.6	84.0	+3.0	80.0
	Dacca	Dacca	29.731	29.775	-.003	SW	220.5	105.9	9th ..	74.1	10th ..	94.3	78.3	83.3	+2.1	80.0
SOUTH-EAST DIVISION.	Comilla	Comilla	29.756	29.801	-.008	S	173.8	94.9	10th ..	74.8	11th ..	92.7	76.6	85.4	+3.0	80.0
	Mymensingh	Mymensingh	29.710	29.754	-.017	NE	149.8	91.5	12th ..	69.8	1	90.7	76.2	82.4	+2.0	80.0
	Rogra	Rogra	29.656	29.719	—	S	130.6	104.3	8th ..	68.6	11th ..	101.3	73.1	87.2	—	80.0
	Putha	Sarajpura	29.663	29.739	-.005	South-Westerly SW	139.9	101.3	8th ..	67.7	9th ..	90.9	72.5	86.2	+4.7	80.0
SOUTH-EAST DIVISION.	Rajshahi	Rajshahi	29.671	29.741	-.007	South-Westerly SW	114.3	102.4	12th ..	68.7	10th ..	100.6	69.7	84.9	+1.3	80.0
	Malda	Malda	29.637	—	—	SW, NW	121.6	101.8	12th ..	68.7	10th ..	101.0	70.0	82.5	—	80.0
	Dinapore	Dinapore	29.613	29.731	-.000	WSW & NE	187	101.7	7th ..	68.2	7th ..	—	70.0	84.3	+3.1	80.0
	Rangpur	Rangpur	29.546	29.719	-.136	NW & SE	149	100.3	8th ..	67.0	10th ..	94.9	71.6	83.4	+5.1	80.0
SOUTH-EAST DIVISION.	Jalpaiguri	Jalpaiguri	29.426	29.746	-.119	Easterly	143.1	92.0	8th ..	61.6	7th ..	89.3	45.2	77.9	-.02	80.0
	Cooch Behar	Cooch Behar	29.426	29.746	-.119	Easterly	143.1	92.0	8th ..	61.6	7th ..	89.3	45.2	77.9	-.02	80.0
	Darjeeling Hill Tracts	Darjeeling	29.900	—	-.077	Variable	—	84.4	8th ..	64.7	10th ..	83.1	48.1	59.1	+3.3	80.0
	Purnea	Purnea	29.604	29.725	-.079	NE	132.0	103.3	8th ..	63.7	10th ..	80.9	67.6	82.2	+0.6	80.0
SOUTH-EAST DIVISION.	North Bhagalpore	North Bhagalpore	29.604	29.725	-.079	NE	132.0	103.3	8th ..	63.7	10th ..	80.9	67.6	82.2	+0.6	80.0
	Moulvibazar	Moulvibazar	29.632	29.718	-.005	ENE & SW	309	98.9	8th ..	60.2	10th ..	90.1	75.0	85.1	+1.6	80.0
	Darbhanga	Darbhanga	29.479	29.685	-.009	Variable	301.1	104.3	8th ..	60.4	10th ..	90.1	68.6	84.0	+1.7	80.0
	Champaran	Champaran	29.537	29.712	-.014	W	249.5	99.5	15th ..	60.6	11th ..	90.4	69.7	81.4	-.21	80.0
SOUTH-EAST DIVISION.	Baran	Baran	29.596	29.734	-.005	SW	202.7	106.4	13th ..	70.0	10th ..	103.8	76.8	86.0	+4.4	80.0
	Shahabad	Shahabad	29.498	29.736	-.001	North-Westerly	238.9	102.9	8th ..	70.3	7th ..	90.4	73.6	85.1	+2.1	80.0
	Gya	Gya	29.535	29.736	-.005	W, NW	169.4	104.4	8th ..	65.7	11th ..	101.6	70.1	86.9	+2.0	80.0
	Patna	Patna	29.545	29.727	-.001	Westerly	137.4	104.9	8th ..	65.7	11th ..	101.4	71.5	86.1	+2.0	80.0
SOUTH-EAST DIVISION.	South Bhagalpore	Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Monghyr	Monghyr	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Baran	Baran	29.596	29.734	-.005	SW	202.7	106.4	13th ..	70.0	10th ..	103.8	76.8	86.0	+4.4	80.0
SOUTH-EAST DIVISION.	Shahabad	Shahabad	29.498	29.736	-.001	North-Westerly	238.9	102.9	8th ..	70.3	7th ..	90.4	73.6	85.1	+2.1	80.0
	Gya	Gya	29.535	29.736	-.005	W, NW	169.4	104.4	8th ..	65.7	11th ..	101.6	70.1	86.9	+2.0	80.0
	Patna	Patna	29.545	29.727	-.001	Westerly	137.4	104.9	8th ..	65.7	11th ..	101.4	71.5	86.1	+2.0	80.0
	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
SOUTH-EAST DIVISION.	Monghyr	Monghyr	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Baran	Baran	29.596	29.734	-.005	SW	202.7	106.4	13th ..	70.0	10th ..	103.8	76.8	86.0	+4.4	80.0
	Shahabad	Shahabad	29.498	29.736	-.001	North-Westerly	238.9	102.9	8th ..	70.3	7th ..	90.4	73.6	85.1	+2.1	80.0
SOUTH-EAST DIVISION.	Gya	Gya	29.535	29.736	-.005	W, NW	169.4	104.4	8th ..	65.7	11th ..	101.6	70.1	86.9	+2.0	80.0
	Patna	Patna	29.545	29.727	-.001	Westerly	137.4	104.9	8th ..	65.7	11th ..	101.4	71.5	86.1	+2.0	80.0
	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Monghyr	Monghyr	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
SOUTH-EAST DIVISION.	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Baran	Baran	29.596	29.734	-.005	SW	202.7	106.4	13th ..	70.0	10th ..	103.8	76.8	86.0	+4.4	80.0
	Shahabad	Shahabad	29.498	29.736	-.001	North-Westerly	238.9	102.9	8th ..	70.3	7th ..	90.4	73.6	85.1	+2.1	80.0
	Gya	Gya	29.535	29.736	-.005	W, NW	169.4	104.4	8th ..	65.7	11th ..	101.6	70.1	86.9	+2.0	80.0
SOUTH-EAST DIVISION.	Patna	Patna	29.545	29.727	-.001	Westerly	137.4	104.9	8th ..	65.7	11th ..	101.4	71.5	86.1	+2.0	80.0
	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Monghyr	Monghyr	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
SOUTH-EAST DIVISION.	South Bhagalpore	South Bhagalpore	29.566	29.726	-.079	W	186	103.4	8th ..	60.6	11th ..	90.1	70.1	85.7	+3.5	80.0
	Baran	Baran	29.596	29.734	-.005	SW	202.7	106.4	13th ..	70.0	10th ..	103.8	76.8	86.0	+4.4	80.0
	Shahabad	Shahabad	29.498	29.736	-.001	North-Westerly	238.9	102.9	8th ..	70.3	7th ..	90.4	73.6	85.1	+2.1	80.0
	Gya	Gya	29.535	29.736	-.005	W, NW	169.4	104.4	8th ..	65.7	11th ..	101.6	70.1	86.9	+2.0	80.0
SOUTH-EAST DIVISION.	Patna	Patna	29.545	29.727	-.001	Westerly	137.4	104.9								

for the week ending Friday, the 13th of April 1888.

DISTRICT OBSERVATIONS.														Representative station.	DISTRICT.	METEOROLOGICAL DIVISION.
Average at 10 A.M.	Average cloud amount at 10 A.M. for week.	Rainfall of week at observing station.	OF WEEK.		RAINFALL.											
			Mean for district.	Normal mean.	Since 1st of month.			Since 15th May 1887.			Average number of rainy days.	Normal number of rainy days.				
					Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.						
78	0.1	Nil	Nil	0.38	Nil	0.50	-0.50	46.52	58.79	-12.28	0.0	0.7	Pooree	Pooree	Central	
79	2.4	—	—	—	—	—	—	—	—	—	—	—	Gopalpara	Pooree	Central	
80	0.7	—	Nil	0.15	0.07	0.31	-0.24	48.00	54.70	-6.70	0.0	0.6	False Point	Pooree	Central	
81	0	—	Nil	0.22	0.21	0.53	-0.30	46.38	50.97	-4.59	0.0	0.4	Cuttack	Cuttack	Central	
82	0	—	Nil	0.22	0.21	0.53	-0.30	46.38	50.97	-4.59	0.0	0.4	Balasore	Balasore	Central	
83	3.3	—	Nil	0.29	Nil	0.35	-0.35	0.92	65.78	-6.86	0.0	0.6	Sunder Island	South-West Midnapore	Central	
84	0.1	—	Nil	0.29	Nil	0.37	-0.37	53.88	56.88	-3.00	0.0	0.6	Midnapore	South 24-Pargunnahs	Central	
85	0.4	—	Nil	0.32	Nil	0.53	-0.53	41.28	55.07	-13.79	0.0	0.7	Calcutta	Midnapore	Central	
86	0	—	Nil	0.30	0.03	0.20	-0.01	48.00	49.39	-1.39	0.0	0.8	Burdwan	24-Pargunnahs	Central	
87	0	—	Nil	0.20	0.07	0.24	-0.17	51.65	54.51	-2.86	0.0	0.5	Bankura	Howrah	Central	
88	0	—	Nil	0.32	Nil	0.45	-0.45	40.00	54.55	-14.55	0.0	0.0	Kanewarunge	Hooghly	Central	
89	0	—	Nil	0.41	Nil	0.30	-1.09	50.00	52.11	+2.11	0.0	0.8	Berhampur	Bankura	Central	
90	0.1	—	Nil	0.00	0.00	1.03	-0.90	48.00	53.32	-5.32	0.0	0.8	Krishnachur	Berhampur	Central	
91	0	—	Nil	0.07	Nil	1.00	-1.00	41.31	56.56	-15.25	0.0	0.0	Jessore	West Burdwan	Central	
92	0.0	0.07	0.00	0.40	0.00	0.63	-0.63	102.46	117.48	-15.02	0.0	0.8	Chittagong	Chittagong	Central	
93	0.0	—	0.00	0.30	0.30	1.00	-1.00	07.25	87.44	-80.19	0.0	1.4	Dumagiri	Chittagong Hill Tracts	Central	
94	3.0	—	Nil	0.30	Nil	0.77	-0.77	04.02	52.34	-48.32	0.0	0.0	Barnaul	Chittagong	Central	
95	4.0	—	Nil	1.30	Nil	1.67	-1.67	78.50	110.31	-31.81	0.0	1.7	Noakhali	Chittagong	Central	
96	1.3	—	Nil	0.77	Nil	1.16	-1.16	41.73	01.30	-40.43	0.0	1.4	Farrukpore	Noakhali	Central	
97	0.1	0.36	0.25	1.08	0.24	1.52	-1.27	47.81	50.75	-2.94	1.0	1.7	Dacca	Farrukpore	Central	
98	0.1	—	0.30	1.22	0.13	1.00	-0.70	51.11	78.16	-27.05	0.0	1.8	Comilla	Dacca	Central	
99	3.7	—	0.10	0.32	0.33	0.08	-0.05	04.12	71.78	-67.66	0.0	1.3	Mymensingh	Comilla	Central	
100	0.0	—	Nil	0.33	Nil	0.45	-0.45	61.56	50.46	+11.10	0.0	0.6	Hogra	Mymensingh	Central	
101	1.4	—	Nil	0.07	Nil	1.02	-1.02	47.80	57.40	-9.60	0.0	0.0	Suraingunge	Hogra	Central	
102	0	—	Nil	0.20	Nil	0.58	-0.38	51.00	50.46	+0.54	0.0	0.5	Rampore	Suraingunge	Central	
103	0	—	Nil	0.20	Nil	0.30	-0.30	47.02	56.50	-9.48	0.0	0.5	Maldah	Rampore	Central	
104	0	—	Nil	0.10	Nil	0.16	-0.16	79.08	57.47	+21.61	0.0	0.3	Dinapore	Maldah	Central	
105	0	—	Nil	0.12	Nil	0.86	-0.86	55.40	76.70	-21.30	0.0	1.1	Rangpore	Dinapore	Central	
106	0.1	—	Nil	0.45	Nil	1.00	-1.00	129.72	118.35	+11.37	0.0	1.0	Jalpigore	Rangpore	Central	
107	2.1	—	Nil	0.58	Nil	1.30	-1.30	121.74	125.74	-4.00	0.0	1.8	Darjeeling	Jalpigore	Central	
108	0	—	Nil	0.27	Nil	0.37	-0.37	06.33	50.40	-44.07	0.0	0.3	Purneah	Darjeeling Hill Tracts	Central	
109	0	—	Nil	0.15	Nil	0.31	-0.31	41.57	44.45	-2.88	0.0	0.3	Mozaffarpore	Purneah	Central	
110	0	—	Nil	0.15	Nil	0.18	-0.18	50.06	46.20	+3.86	0.0	0.2	Darbhanga	Mozaffarpore	Central	
111	0.0	—	Nil	0.25	Nil	0.31	-0.31	49.07	47.04	+2.03	0.0	0.2	Madhubani	Darbhanga	Central	
112	0	—	Nil	0.00	Nil	0.07	-0.07	46.37	43.09	+3.28	0.0	0.2	Champara	Madhubani	Central	
113	0	—	—	—	—	—	—	—	—	—	—	—	Dohore	Champara	Central	
114	0	—	Nil	0.00	—	0.12	-0.12	38.67	41.30	-2.63	0.0	0.3	Maner	Dohore	Central	
115	0	—	Nil	0.00	Nil	0.10	-0.10	36.34	40.67	-4.33	0.0	0.2	Gya	Maner	Central	
116	0	—	Nil	0.00	Nil	0.08	-0.08	50.81	48.33	+2.48	0.0	0.3	Bankipore	Gya	Central	
117	0	—	Nil	0.18	Nil	0.20	-0.20	43.80	44.34	-0.54	0.0	0.4	Shahpore	Bankipore	Central	
118	0	—	Nil	0.20	Nil	0.25	-0.25	53.41	51.06	+2.35	0.0	0.4	Dumra	Shahpore	Central	
119	0	—	Nil	0.00	Nil	0.00	-0.00	46.07	50.10	-4.03	0.0	0.3	Hazratnagar	Dumra	Central	
120	0.0	—	Nil	0.15	Nil	0.26	-0.26	46.85	40.45	+6.40	0.0	0.6	Maner	Hazratnagar	Central	
121	0	—	Nil	0.24	0.00	0.28	-0.28	53.11	55.70	-2.59	0.0	0.4	Chyauwara	Maner	Central	

When the mean for the week is less than the corresponding normal mean, and positive when greater. Under the term District observations of rainfall the normal mean is the mean of the observations of the whole district, the whole district being divided into 10. Under the term District observations of rainfall the normal mean is the mean of the observations of the whole district, the whole district being divided into 10. Under the term District observations of rainfall the normal mean is the mean of the observations of the whole district, the whole district being divided into 10.

## Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 13th of April 1888.

Meteorological Station.	District.	Station.	RAINFALL.							TOTAL.		Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 15th May 1887.	Average rainfall from 15th May to date.
			Saturday, 7th April.	Sunday, 8th April.	Monday, 9th April.	Tuesday, 10th April.	Wednesday, 11th April.	Thursday, 12th April.	Friday, 13th April.	Number of rainy days.	of rainfall week.				
SOUTH-WEST BENGAL.	Pooree	Pooree	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.16	56.85	63.61
		Khurda	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.19	59.03	69.19
		Baspur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.25	59.08	64.00
		Pome Point	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.38	70.09	67.70
		Gop	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	30.22	?
		Pipili	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	?	?
	Cuttack	Jagatsinghpore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.14	53.68	60.60
		Banki	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.14	47.06	48.44
		Cuttack	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.28	57.43	58.91
		Kundrapara	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.33	54.78	61.62
	Balaspore	Jaspore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.63	50.80	56.90
		Dharmasalla	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	44.79	?
		Balispore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	51.31	?
		Chandhall	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.50	45.00	50.81
		Bhuddruck	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.49	48.88	56.53
		Rorah	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.48	47.40	53.50
		Balasore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.44	50.18	61.95
		Jollasore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.47	40.05	55.48
		Baripodah	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.08	41.48	47.45
	Midnapore	Contai	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.33	52.05	64.00
		Rangor Island	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.33	74.18	69.55
		Tumlook	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.31	51.63	54.79
		Midnapore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.34	40.12	51.93
		Chittin	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.45	54.20	57.47
		Kukrabady	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	58.32	?
		Heria	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	41.41	?
		Shagwampore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	45.00	?
		Garbeta	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	51.97	?
	St. Pargannahs	Diamond Har- bour	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.50	61.03	62.30
		Canning Town	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	61.38	?
		Alipore Jail	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.67	67.20	69.57
		Barrackpore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.60	43.04	53.57
		Ilum-Dum	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.62	43.92	55.50
		Burari	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.61	43.45	53.53
		Bunderhat	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.40	51.26	53.50
	Howrah	Howrah	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.81	44.91	54.90
		Mohesania (Ostoberia.)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.39	41.74	50.19
	Hooghly	Merampore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	37.05	54.31
		Hooghly	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.66	42.97	51.80
		Jinnabadi	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.58	37.73	46.16
	Burdwan	Culina	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.60	40.37	47.35
		Burdwan	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.08	67.45	61.21
		Cutwa	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.08	50.63	50.53
		Ranagunge	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.32	47.10	51.20
		Manikur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	41.30	?
	Bankura	Bankura	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.43	45.32	54.55
		Kishorepore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.31	57.32	53.58
		Mahara	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.06	60.57	51.19
		Khatra	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.09	61.12	58.99
		Indas	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	62.01	?
		Kotalpore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	46.10	?
		Anda	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	39.49	?
		Gangajalghati	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	56.48	?
		Karpore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	53.61	?
		Bonamukhi	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	38.08	?
	Beerbhoom	Bh. Borey	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.32	51.35	56.10
		Hatnampore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.44	51.97	58.70
		Bampur Haul	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.09	45.60	43.70
		Boipore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	42.50	?
	Kudra	Banaghat	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.29	51.13	51.18
		Kishorepur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.06	44.53	49.97
		Chowadanga	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.08	46.39	45.57
		Methorpore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.08	51.72	51.08
		Koomitoo	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.02	48.55	48.79
	Khoolna	Baikhira	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	40.93	41.44
		Hagirlat	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	54.94	54.20
		Khoolna	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	40.31	40.35
	Jessore	Narail	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.97	38.78	51.65
		Jessore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.30	44.11	48.79
		Jibandah	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.35	47.09	48.70
		Magorah	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1.18	31.50	44.11
		Baugong	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.36	46.68	44.70
	Moorshedabad	Kandi	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.70	40.47	42.77
		Berhampore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.48	57.86	54.50
		Lalbagh	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.20	70.20	54.40
		Azamgungo	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	61.10	54.20
		Jangipore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.67	64.47	50.15
		Lalgaia	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.00	56.79	50.70
		Akripur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	54.46	?
		Patkauri	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	?	?
SOUTH-BENGAL.	Chittagong	Cor's Haar	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.53	13.78	23.00
		Chittagong	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.73	40.17	40.77
		Kutubdia	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	70.00	?
		Satkhaga	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	?	50.61	?
	Chittagong 1148 Tracts.	Baagmati	Nil	Nil	0.79	Nil	Nil	Nil	Nil	1	0.79	0.79	1.30	40.00	40.00
		Kalma	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2.1	Nil	Nil	1.00	40.21	40.21
	Hachergangoo	Palakhalty	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.73	70.79	40.00
		Purandarpore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.43	40.00	40.00
		Hurrial	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.73	40.00	40.00
		Bhoim	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0.73	40.00	40.00

## Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 13th of April 1888—contd.

Meteorological Division.	District.	Station.	Rainfall.							TOTAL.		Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 15th May 1887.	Average rainfall from 15th May to date.
			Saturday, 7th April.	Sunday, 8th April.	Monday, 9th April.	Tuesday, 10th April.	Wednesday, 11th April.	Thursday, 12th April.	Friday, 13th April.	Number of rainy days.	Of rainfall week.				
WEST BENGAL—contd.	Naukhally	Gouradai	...	...	...	...	...	...	...	Nd	Nd	Nd	?	45.40	?
		Banphal	...	...	...	...	...	...	...	Nd	Nd	Nd	?	46.07	?
		Naukhally	...	...	...	...	...	...	...	Nd	Nd	Nd	1.57	77.08	116.80
	Farredpore	Farredpore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.77	79.39	116.44
		Farredpore	...	...	...	...	...	...	...	Nd	Nd	Nd	?	77.07	?
		Farredpore	...	...	...	...	...	...	...	Nd	Nd	Nd	?	77.07	?
	Dacca	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Hill Tipperah	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Mymensingh	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Pabna	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Rajshahy	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Maldah	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Dinapore	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Rangpore	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Jalpigore	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Cooch Behar	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Barjoiling Hill.	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Purneah	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	North Bengal-pore.	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Darrhanga	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Koochpore	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08
	Chaugachan	Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.18	38.50	61.08
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.27	43.50	63.70
		Mudaliore	...	...	...	...	...	...	...	Nd	Nd	Nd	1.30	41.28	61.08

Statement of Rainfall in Bengal for the week ending Friday (6 p.m.), the 13th of April 1888—*concl.*

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 1st of May 1887.	Average rainfall from 1st of May to date.
			Saturday, 7th April.	Sunday, 8th April.	Monday, 9th April.	Tuesday, 10th April.	Wednesday, 11th April.	Thursday, 12th April.	Friday, 13th April.	Number of rainy days.	of Rainfall inch.				
NORTH BENGAL— <i>continued.</i>	Saran	Gopalgunge	...	...	...	...	...	...	...	Nil	Nil	Nil	0.00	44.65	44.65
		Benwar	...	...	...	...	...	...	...	Nil	Nil	Nil	0.00	38.74	38.74
SOUTH BENGAL	Shuhabad	Chunprab	...	...	...	...	...	...	...	Nil	Nil	Nil	0.11	38.70	38.70
		Bhakar	...	...	...	...	...	...	...	Nil	Nil	Nil	0.18	38.78	38.78
		Bhutanah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.08	38.76	38.76
		Bamunah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	41.84	41.84
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	38.38	38.38
		Alahada	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	41.54	41.54
			...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
	Gya	Antuogahad...	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	38.90	38.90
		Gya	...	...	...	...	...	...	...	Nil	Nil	Nil	0.00	43.87	43.87
		Nowadah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	38.91	38.91
		Chunprab	...	...	...	...	...	...	...	Nil	Nil	Nil	0.11	43.77	43.77
		Arson	...	...	...	...	...	...	...	Nil	Nil	Nil	?	41.18	41.18
		Isadungar	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.01	38.01
		Shereghati	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.45	38.45
		Barjanis	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Pakri barawan	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.34	38.34
	Patna	Patna	...	...	...	...	...	...	...	Nil	Nil	Nil	0.07	37.17	37.17
		Bhupote	...	...	...	...	...	...	...	Nil	Nil	Nil	0.00	38.44	38.44
		Bahar	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	38.54	38.54
		Bikram	...	...	...	...	...	...	...	Nil	Nil	Nil	0.08	38.91	38.91
		Alah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	40.55	40.55
			...	...	...	...	...	...	...	Nil	Nil	Nil	?	34.37	34.37
	Monghyr	Begumbari	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	40.08	40.08
		Blanchy	...	...	...	...	...	...	...	Nil	Nil	Nil	0.18	47.26	47.26
		Jamun	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	40.62	40.62
		Gyri	...	...	...	...	...	...	...	Nil	Nil	Nil	?	42.63	42.63
		Shakhpura	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.58	38.58
	South Bhagalpur	Shakhpura	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	41.23	41.23
		Bhagalpur	...	...	...	...	...	...	...	Nil	Nil	Nil	0.10	38.16	38.16
		Kidpur	...	...	...	...	...	...	...	Nil	Nil	Nil	?	40.41	40.41
	South Pyrgumud	Rajmahal	...	...	...	...	...	...	...	Nil	Nil	Nil	0.18	47.26	47.26
		Caudia	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	40.62	40.62
		Barout	...	...	...	...	...	...	...	Nil	Nil	Nil	0.17	38.65	38.65
		Nya Bhonka	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	40.64	40.64
		Bahar	...	...	...	...	...	...	...	Nil	Nil	Nil	0.20	47.63	47.63
		Jamun	...	...	...	...	...	...	...	Nil	Nil	Nil	0.08	40.24	40.24
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.81	38.81
CENTRAL NAGPUR.	Hamirbazar	Hamirbazar	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	42.00	42.00
		Gurda	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	47.48	47.48
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	41.27	41.27
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.08	40.64	40.64
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.71	38.71
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	40.10	40.10
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.46	38.46
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	41.64	41.64
	Lohardugga	Lohardugga	...	...	...	...	...	...	...	Nil	Nil	Nil	?	37.68	37.68
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	40.64	40.64
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	40.71	40.71
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.36	38.36
	Sughtoom	Chyotoom	...	...	...	...	...	...	...	Nil	Nil	Nil	0.08	40.11	40.11
		Chyotoom	...	...	...	...	...	...	...	Nil	Nil	Nil	0.15	41.40	41.40
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.79	38.79
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38.06	38.06
	Manbhoom	Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	43.91	43.91
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?
		Barah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	?

Explanation.—Indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 17th April 1888.



**SUMMARY OF THE RAINFALL AND METEOROLOGICAL OBSERVATIONS  
TAKEN IN BENGAL FOR THE WEEK ENDING FRIDAY, THE 18TH  
APRIL 1888.**

At the close of the previous week, ordinary hot weather conditions prevailed over Bengal. As is usual at this season, hot dry westerly winds were blowing in Behar, in West and Central Bengal, and had even penetrated over a large part of North Bengal. In South-West Bengal south-westerly winds were blowing, bringing up moderate amounts of moisture into the Province; while in East and South-East Bengal very moist southerly and south-easterly winds were blowing. Down the Assam Valley a steady north-easterly current was reported, which apparently penetrated along the foot of the hills as far as Julpigoree. The meteorological conditions in neighbouring districts of the Province on the 6th were very diverse. Thus at Rampore Beaulah on this day a dry south-westerly wind was reported, the saturation with moisture being only 23 per cent., at Bogra the air saturation was only 21 per cent., and at Berhampore only 18 per cent., while in the neighbouring part of South-East Bengal winds were very moist, and thus at Dacca the air saturation was 70 per cent. and at Furreedpore 65 per cent. On the 7th a sudden increase in the strength of the moist winds appears to have taken place, and humidity rose rapidly at many stations, only, however, to decrease quite as suddenly on the following day, when apparently a rapid increase took place in the strength of the dry westerly wind which was blowing over the north and centre of the Province. These remarkable changes in humidity, which point to equally remarkable and sudden shifts of wind with probably more or less corresponding changes of temperature during the period April 6th to the 9th, are best shown in the form of a small table.

*Table showing the saturation of air with moisture. Complete saturation = 100.*

DATES.	CENTRAL AND NORTH BENGAL.							EAST AND SOUTH-EAST BENGAL.				
	Rangunge.	Berhampore.	Rampore Beaulah.	Bogra.	Maldah.	Dinagore.	Rungpore.	Chittagong.	Burisal.	Noakholy.	Furreedpore.	Dacca.
April, 6th ...	9	18	23	21	31	11	16	68	72	70	65	70
" 7th ...	81	63	61	58	49	13	45	63	73	68	63	72
" 8th ...	3	17	27	27	26	10	42	74	73	73	61	73
" 9th ...	7	15	18	14	27	7	21	79	66	67	32	80

From these figures it will be clearly seen that the moisture laden current, which on the 6th was confined to the south of the Province, had advanced between the 6th and the 7th in a northerly direction, and had on the morning of the 7th penetrated as far as Central Bengal, as represented by Berhampore, and into the southern part of North Bengal, as represented by Rampore Beaulah, Bogra, Maldah and Rungpore; but that it had failed to reach as far as Dinagore. The moisture laden current was, however, driven back during the period 10 A.M. of the 7th to the 8th, and by 10 A.M. of the 8th the dry westerly wind had almost completely re-established its former position. These fluctuations in the area occupied by these more or less opposite winds are unusually large and well-marked, and such cannot happen unless the atmosphere is in a somewhat disturbed condition. The result of such a conflict of more or less opposing winds, varying so largely as to humidity, &c., is usually to produce the local storms known as nor'westers; and as a matter of fact, during the first few days of the week, local storms were reported from several stations in the Dacca, Chittagong, Noakholy, Mymensingh and Tipperah districts of East Bengal.

In addition, however, to the usual local storms or nor'westers which thus occurred, the disturbed conditions in the Dacca district were accompanied by the formation of a small but very violent tornado or whirlwind, which passed through the town of Dacca and the neighbouring district on the evening of the 7th, and which caused much destruction of life and property throughout its course. It is very rarely that Bengal is visited by storms of this type, and on account of the suddenness of their appearance, their short duration, the small path over which they act with destructive violence, and the difficulty in obtaining reliable and accurate accounts of the phenomena preceding and attending them, no attempt has hitherto been made to work out scientifically the subject of Indian tornadoes. Two or three only have in fact been described. On the other hand, tornadoes of the most violent character are rather frequent in parts of the United States, and the scientific work which has there been done on their history shows that the atmospheric conditions which appear invariably to precede the formation of a tornado are violent contrasts of temperature and humidity immediately to the north and south of the path to be traversed by the storm. From the above description of the weather in parts of East and North Bengal at the beginning of the week, it will be seen that the conditions were precisely those which are invariably found to precede tornadoes in the United States. In addition, however, to these antecedent conditions, there must be some particular cause or set of causes which must determine the formation of a tornado, but of which nothing is at present known, for

similar, though perhaps not such violent, contrasts of temperature and humidity in different air currents in Bengal frequently happen at this season of the year; yet in most cases they are only followed by the formation of dust-storms and nor'westers, but which are sometimes very fierce, and it is only from the presence of some unknown exceptional conditions that perhaps once in five or ten years excessively fierce whirl winds, tornadoes or even water-spouts are formed, instead of the usual class of Indian hot-weather storms. Much doubt exists as to where the enormous energy displayed in tornadoes is derived from; but it is possible, as in the case of cyclones, the energy is derived from the condensation of aqueous vapour into rain, for in most tornadoes torrential rain follows after the passage of the storm.

Detailed and accurate accounts of the Dacca tornado have not yet been received; but the meteorological observer at that station estimates its width to have been only 200 yards; it pursued apparently a zigzag course for a considerable distance both over Dacca and parts of the surrounding country, but its commencement and ending have not been accurately ascertained. The general track of the storm was probably from S.W. to N.E., and it passed through the compound of the meteorological observatory. The observatory and its instruments were not damaged, as at this period the violence of the storm did not reach down to the ground, but the tops only of five large trees in the compound were cut off at about 30 feet from the ground. The time of commencement of the storm at the observatory is given by the observer to be 7-30 p.m. (Madras or local time), and its duration to have been three minutes only. The force of the wind was excessive. Further details will be given when the full history of the storm is subsequently discussed.

The remaining details of the meteorology of the week are of comparatively little interest. In connection apparently with the disturbed conditions which gave rise to the tornado, a large low pressure area was developed over North Bengal on the 8th, which still existed on the 9th, but which disappeared on the 10th. There is, however, nothing at present to show that any barometric depression was generated previous to the formation of the storm on the 7th. For the remainder of the week there have been the usual slight oscillations of pressure and temperature; but in the case of humidity at the stations considerably removed from the sea coast, the percentage of saturation has been exceptionally low almost throughout the week, except when the abnormal oscillations of humidity above referred to occurred in the central and eastern parts of the province.

**Pressure.**—Generally for the first two days of the week fell decidedly; from the 9th to the 11th a slight but distinct rise occurred; while on the 12th and 13th pressure again commenced to fall by small amounts. As already stated, a low pressure area existed over North Bengal for a part of the week, and at such stations as Rungpore and Julpigoree the average pressure for the week has been more than a tenth of an inch below the normal. Taking into consideration only the stations from which averages have been received for a series of years, and which therefore yield reliable averages, the mean pressure of the Province for the week has been 0.067 inch below the normal.

**Temperature.**—Has throughout the week been very high, and the mean temperature of the whole province has been two degrees in excess of the normal; while in such districts as Chutia Nagpur and North Bengal the excess has been nearly three degrees. Some very high maximum temperatures have again been recorded, the hottest day of the week being usually the 13th. The following are some of the highest temperatures recorded:—

At Bankoora	on the 13th	...	...	...	108.6°
„ Ranignage	„ 13th	...	...	...	108.5°
„ Chyebassa	„ 13th	...	...	...	108.3°
„ Midnapore	„ 13th	...	...	...	107.9°
„ Burdwan	„ 13th	...	...	...	106.8°
„ Gya	„ 13th	...	...	...	106.5°
„ Dehree	„ 13th	...	...	...	106.4°
„ Nya Doomka	„ 8th	...	...	...	106.1°

At Calcutta (Alipore) the highest temperature during the week was 100.4° on the 9th.

The following table shows the temperature variations during the week at eight typical stations in the province:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 13th April 1888.

	Normal mean maximum temperature for the week ending 13th April.	Actual mean maximum temperature for the week ending 13th April 1888.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 13th April.	Actual mean minimum temperature for the week ending 13th April 1888.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 13th April.	Actual mean daily temperature for the week ending 13th April 1888.	Variation of actual mean from the normal.
Calcutta	84.7	86.6	+1.9	75.1	75.8	+0.7	84.9	86.2	+1.3
Dacca	82.9	84.8	+1.9	73.4	76.1	+2.7	83.2	85.5	+2.3
Burdwan	100.2	104.3	+4.1	74.9	76.0	+1.1	87.8	89.1	+1.3
Patna	100.8	101.4	+0.6	71.8	71.5	-0.3	88.2	88.5	+0.3
Gya	102.6	104.0	+1.4	74.4	80.1	+5.7	88.5	90.4	+1.9
Purneah	88.8	89.9	+1.1	68.8	67.5	-1.3	82.7	82.3	-0.4
Basuribagh	86.6	87.8	+1.2	70.6	71.5	+0.9	84.6	84.8	+0.2
Burjooling	60.2	68.1	+7.9	45.3	48.1	+2.8	52.8	55.1	+2.3

**Humidity.**—The following exceptionally low humidities have been recorded during the week. The numbers given represent the amount of saturation of the air with moisture, 100 equalling complete saturation :—

At Ranigunge on the 8th	humidity was ...	... 8 per cent
" Ditto " 9th	" ...	... 7 "
" Dinagepore " 9th	" ...	... 7 "
" Motihari " 8th and 9th	" ...	... 6 "
" Dehree " 8th	" ...	... 5 "
" Ditto " 9th and 10th	" ...	... 7 "
" Ditto " 11th	" ...	... 0 "
" Buxar " 8th	" ...	... 8 "
" Bankipore " 8th	" ...	... 8 "
" Bhagulpore " 8th	" ...	... 6 "
" Nya Doomka " 8th and 9th	" ...	... 8 "
" Hazaribagh " 7th	" ...	... 8 "
" Ditto " 8th	" ...	... 4 "
" Ditto " 9th	" ...	... 5 "

**Winds.**—In addition to the facts with reference to the distribution of the winds given in the general summary, the strength of the southerly winds blowing during the week at the head of the Bay has to be noticed, and thus at Saugor Island from the 7th to the 8th 648 miles were recorded on the anemometer, and from the 12th to the 13th 600 miles. The average daily velocity at Saugor Island during the week has been no less than 535 miles, or 22 miles an hour.

**Rainfall.**—The only rainfall which has occurred during the week has been in East Bengal which has been brought by the local storms as previously described. The average rainfall, in East Bengal, has, however only been 0·16 inch. With this exception the whole Province has been rainless. At Dacca the rainfall on the 7th was only 0·42 inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 13th of April 1888 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of Month.		Since 1st of May 1887.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	108·4†	74·3	94·1	78·3	86·2	+1·3	Nil	0·30	-0·30	0·0	0·7	-0·7	0·13	0·46	47·01	56·73
South-West Bengal	108·0	67·9	101·7	75·9	88·8	+2·4	Nil	0·42	-0·42	0·0	0·8	-0·8	0·03	0·84	49·89	55·36
East Bengal	98·5	69·6	91·6	75·7	83·7	+2·4	0·16	0·86	-0·70	0·3	1·5	-1·2	0·27	1·23	61·50	80·63
North Bengal	104·3	61·4	97·9	70·3	84·1	+2·8	Nil	0·35	-0·35	0·0	0·8	-0·8	Nil	0·04	73·72	72·57
North Behar	105·3	60·4	96·8	69·1	82·9	+0·3	Nil	0·18	-0·18	0·0	0·4	-0·4	Nil	0·24	53·07	49·68
South Behar	106·3	63·7	101·7	72·6	86·9	+1·9	Nil	0·12	-0·12	0·0	0·3	-0·3	Nil	0·10	42·85	46·03
Dacca Nagpur	101·3*	66·2*	97·9*	73·6*	85·3*	+2·9*	Nil	0·12	-0·12	0·0	0·5	-0·5	0·01	0·16	46·50	51·26

\* Chyabassa not included.  
† Cuttack not included.




METEOROLOGICAL OFFICE, BENGAL;

A. PEDLER,

The 17th April 1888.

Offg. Meteorological Reporter to the Govt. of Bengal.

**Results of the Meteorological Observations taken at the Alipore Observatory from  
8th to 14th April 1888.**

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				Prevailing direction.	Miles recorded.	Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.				
1888.		°		Inches	°	°	°	°	Inches	°	%				Inches	
April	8th	164.5	9.9	29.629	86.6	100.4	27.9	72.5	73.6	0.660	66.8	57	WNW and SW by N	180	Nil	Chiefly clear.
"	9th	153.0	10.3	655	85.3	97.5	24.8	72.7	71.0	597	64.0	55	SW and WNW	91	"	Clear,  .
"	10th	152.8	10.2	670	85.4	98.6	24.7	73.9	75.9	771	71.4	67	SW and SSW	152	"	Clear,  .
"	11th	150.0	10.2	664	80.0	95.8	17.8	77.5	79.0	901	76.1	74	SSW and S	248	"	Chiefly clear.
"	12th	151.2	9.0	694	86.5	94.5	18.1	78.4	79.7	926	76.9	74	SSW and S	227	"	Partially cloudy.
"	13th	153.8	6.9	744	87.5	89.8	21.6	78.2	79.4	904	76.2	71	SSW and SW	200	"	Partially cloudy.
"	14th	158.1	9.3	721	86.6	97.7	19.6	78.2	80.0	937	77.8	75	SW and SSW	262	"	Partially cloudy,  .

The mean pressure of the seven days	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, S. G.'s Office	...	...	...	29.685
The total number of hours of bright sunshine	...	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	...	65.8
The mean temperature of the seven days	...	...	...	°
The average temperature of the corresponding period for 24 years, S. G.'s Office	...	...	...	87.8
The extreme variation of temperature	...	...	...	86.3
The maximum temperature	...	...	...	84.9
	...	...	...	27.9
	...	...	...	100.4
The highest velocity of the wind in one hour	...	...	...	Miles.
	...	...	...	15
The highest pressure of wind on one square foot	...	...	...	lbs.
	...	...	...	Not measurable.
The mean relative humidity	...	...	...	%
The average relative humidity of the corresponding period for 24 years, S. G.'s Office	...	...	...	68
The total fall of rain from 8th to 14th April 1888	...	...	...	Inches.
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	Nil
The total fall from 1st January to 14th April 1888	...	...	...	0.25
The average fall of the corresponding period for 24 years, S. G.'s Office	...	...	...	4.89
	...	...	...	8.41

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph. The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard Newman's No. 54 formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o overcast,  dew,  fog.

ALEX. PEDLER,

For Offg. Meteorological Reporter to the Govt. of India

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 16th April 1888.

## Results of the Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 8th to 14th April 1888.

MONTH.	Date.	TEMPERATURE.				Mean wet bulb.	HYGROMETRY.			Rain.
		Mean.	Maximum.	Range.	Minimum.		Vapour tension.	Dew point.	Humidity.	
1888.		°		°		°	Inches.	°	%	Inches.
April	8th	86.4	102.0	20.7	72.3	70.0	538	61.0	48	Nil.
"	9th	85.9	100.0	27.2	72.8	67.1	514	53.7	33	"
"	10th	86.6	100.5	25.7	74.8	71.7	514	58.2	58	"
"	11th	86.8	100.0	23.0	77.0	78.7	587	75.6	72	"
"	12th	87.1	87.2	18.6	78.6	80.3	543	77.6	79	"
"	13th	87.9	102.0	23.4	78.0	80.1	523	76.8	70	"
"	14th	86.3	101.0	21.4	78.0	81.1	523	79.0	79	"

The mean temperature of the seven days ... 86.4

The extreme variation of temperature ... 29.7

The maximum temperature ... 102.0

The mean relative humidity ... 61  
Inches.

The total fall of rain from 8th to 14th April 1888 ... Nil.

The mean temperature and humidity are obtained by applying to the mean of the 10h, 16h, and minimum readings a correction dependent on the range, and derived from the hourly observations at the Surveyor-General's Office, Chowringhee, in past years.

METEOROLOGICAL OFFICE, INDIA;

The 16th April 1888.

ALEX. PEDLER,

For Offg. Meteorological Reporter to the Govt. of India.

## MEMORANDUM.

The following is a summary of the main facts connected with the vital statistics of the principal Municipalities in Bengal for the week ending 31st March 1888, as deduced from the annexed table—

1. That, during the week in question, births and deaths were registered in the proportions, respectively, of 20·1 and 27·8 per 1,000 of population, as opposed to 22·5 and 29·3 per 1,000, respectively, during the preceding week ending 24th March, indicating a retrogression in their registration.

2. That the following Municipalities returned the highest proportions of births and deaths:—

<i>Births.</i>			<i>Deaths.</i>		
		Ratio per mille.			Ratio per mille.
Kishnaghur	...	45·4	Serampore	...	84·4
Durbhanga	...	37·8	Comillah	...	65·5
Monghyr	...	29·8	Suburbs of Calcutta	...	57·7
			Bali	...	35·1
			Beaulah	...	34·2
			Gya	...	29·4
			Puri	...	29·4
			Narainganj	...	29·0
			Bhagulpore	...	29·0

3. That the casualty-rates from the principal diseases specified below exhibit no noticeable variations in comparison with the death-rates from the same diseases in the preceding week:—

						Ratio per mille during the weeks ending—	
						31st March 1888.	24th March 1888.
Cholera	...	...	...	...	...	9·2	9·3
Small-pox	...	...	...	...	...	·2	·2
Fever	...	...	...	...	...	9·0	9·8
Bowel-complaints	...	...	...	...	...	2·7	2·6
Injury	...	...	...	...	...	·2	·4
Other causes	...	...	...	...	...	8·4	7·0

4. That eliminating fever and bowel-complaints which proved notably fatal, the former only in the Beaulah town, viz. at the rate of 21·0 per 1,000 of population, and the latter in the Puri Municipality, viz. at 10·5 per 1,000, and small-pox and injury which did not exhibit any local exacerbation in fatality, cholera and the maladies returned under the head of "other causes" manifested exceptional mortality in the following Municipalities:—

<i>Cholera.</i>			<i>Other causes.</i>		
		Ratio per mille.			Ratio per mille.
Serampore	...	63·8	Midnapore	...	17·0
Comillah	...	50·1	Suburbs of Calcutta	...	11·6
Suburbs of Calcutta	...	29·4	Gya	...	10·2
Howrah	...	14·3			
Hughli	...	5·4			

It will be seen from the above figures that cholera appears to have prevailed very severely in Serampore, Comillah, the Suburbs of Calcutta and Howrah.

5. That the death-rates under the heads of *Sex*, *Class* and *Age* stood as shown below:—

<i>According to Sex.</i>		<i>According to Class.</i>		<i>According to Age.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males	31·1	Christians	13·0	Under 1 year	188·9
Females	24·0	Hindus	28·0	1 and under 5 years	46·0
Ratio of male deaths to every 100 female deaths	147	Mahomedans	38·1	5 " 10 "	14·7
				10 " 15 "	12·7
				15 " 20 "	28·0
				20 " 30 "	21·7
				30 " 40 "	19·4
				40 " 50 "	20·4
				50 " 60 "	26·8
				60 years and upwards	53·0

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,  
Offg. Sanitary Commissioner for Bengal.

The 16th April 1888.



[illegible]

K. P. GUPTA, M.B., F.R.C.S., Surgeon-Major,  
D.M.  
SARVODAYA HOSPITAL, 194





## KENDRAPARA CANAL SYSTEM.

LENGTH OF CANAL OPEN, 75 MILES.

Number of boats or rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Quantity.	Value.	
		Up.	Down.	Total.	Tons.	Rupces.	
216	1. Grain	661	1,260	1,921	1,921	1,09,540	
15	2. Cotton	4	197	201	201	22,060	
28	3. Oilseeds	78	61	139	139	11,940	
.....	4. Salt	.....	.....	.....	.....	.....	
.....	5. Piece-goods	.....	.....	.....	.....	.....	
.....	6. Metal	.....	.....	.....	.....	.....	
97	7. Building materials	50	1,022	1,072	1,072	7,580	
146	8. Miscellaneous	751	454	1,205	1,205	3,31,960	
6	9. Fuel	47	5	52	47	140	
18 rafts	10. Timber	.....	1,899 No.	1,899 No.	1,899 No.	3,390	
36 "	11. Bamboos	.....	165,400 "	165,400 "	165,400 "	2,480	
508 & 54 rafts.	12. Total	1,591	{ 2,999 & 167,299 No.	{ 4,590 & 167,299 No.	{ 3,896 & 167,299 No.	{ 4,89,090 } { 4,86,630 }	
428 & 88 rafts.	13. Total of same month last year	{ 1,288 & 61 No.	{ 1,714 & 69,311 No.	{ 3,002 & 69,372 No.	{ 2,677 & 69,372 No.	{ 2,06,790 } { 2,05,740 }	
14. Total number of boats plying cargo	No.	249	259	508	Total tollage of month— 24 + 25 + 26 ...		Rs. A. P. 5,891 14 1
15. Total number of boats plying passenger	No.	56	53	109	Total tollage of same month last year ...		4,769 10 5
15½. Total number of empty boats	No.	235	185	420	Memorandum of Tollage.		
16. Total registered tonnage, cargo	Tons.	3,065	4,585	7,660	Rs. A. P.		
17. Total registered tonnage, passenger	Tons.	1,347	1,146	2,493	1. Balance not recovered on the 1st of the month ...		
18. Ton-mileage	...	124,404	167,268	291,672	7,665 11 0		
19. Estimated value of cargo	Rs.	2,31,180	2,52,010	4,83,220	2. Tollage per month ...		
20. Number of passengers	...	3,146	2,583	5,729	5,891 14 1		
21. Rafts, bamboos	No.	...	165,400	165,400	3. Total ...		
22. Do., timber	"	.....	1,899	1,899	13,557 9 1		
23. Estimated value of rafts	...	.....	5,870	5,870	4. Amount credited in the accounts of the month ...		
24. Tollage on boats	Rs.	2,545-7-7	3,030-3-7	5,575-11-2	5,323 2 4		
25. Compounded tollage on boats	Rs.	.....	.....	.....	28. Tollage on rafts		
26. Tollage on rafts	"	.....	316-2-11	316-2-11	27. Total tollage on boats per ton-mile ...		
27. Total tollage on boats per ton-mile	...	.....	.....	0-0-3-3	5. Balance due at the end of the month ...		
28. Total tollage on rafts per 100 cubic feet	...	.....	.....	0-8-0	8,324 56		

## HIGH LEVEL CANAL, RANGE I.

LENGTH OF CANAL OPEN, 33 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupces.	Tons.	
193	1. Grain ...	705	.....	705	51,730	705	51,730
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....
4	3. Oilseeds ...	21	.....	21	1,500	21	1,500
41	4. Salt ...	.....	124	124	10,500	124	10,500
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
.....	6. Metal ...	.....	.....	.....	.....	.....	.....
59	7. Building materials ...	91	559	650	850	84	580
139	8. Miscellaneous ...	384	123	507	16,240	507	16,240
37	9. Fuel ...	294	.....	294	820	294	820
4 rafts.	10. Timber ...	3,087 No.	.....	3,087 No.	6,580	3,087 No.	6,580
2 "	11. Bamboos ...	.....	6,500 No.	6,500 "	100	6,500 "	100
473	12. Total No.	1,495	806	2,301	88,320	1,775	88,050
6 rafts.		3,087 No.	6,500 No.	9,587 No.		9,587 No.	
558	13. Total of same	581	282	863	59,250	700	59,180
2 rafts.	month last year No.	3,410 No.	9,000 No.	12,410 No.		12,410 No.	
		Up.	Down.	Total.			Rs. A. P.
Total number of boats plying cargo No.		353	120	473	Total tollage of month— 24 + 25 + 26 ...		1,070 7 2
Total number of boats plying passenger No.		3	.....	3	Total tollage of same month last year ...		902 11 0
Total number of empty boats No.		94	300	394	<i>Memorandum of Tollage.</i>		
Total registered tonnage, cargo Tons.		2,753	1,366	4,119			
Total registered tonnage, passenger Tons.		11	.....	11			
Ton-mileage ...		40,239	19,763	51,002			
Estimated value of cargo Rs.		57,960	23,680	81,640			
Number of passengers ...		3	.....	3			
Rafts, bamboos No.		.....	6,500	6,500			
Do., timber "		3,087	.....	3,087			
Estimated value of rafts ...		6,580	100	6,680			
Tollage on boats Rs.		695-9-5	324-13-3	1,020-6-8			
Compounded tollage on boats Rs.		.....	.....	.....			
Tollage on rafts "		43-15-0	6-1-6	50-0-6			
Total tollage on boats per ton-miles ...		.....	.....	0-0-3-8			
Total tollage on rafts per 100 cubic feet ...		.....	.....	0-8 4			
					1. Balance not recovered on the 1st of the month ...		533 0 3
					2. Tollage per month ...		1,070 7 2
					3. Total ...		1,603 7 5
					4. Amount credited in the accounts of the month ...		1,031 7 8
					5. Balance due at the end of the month ...		571 15 9

## HIGH LEVEL CANAL, RANGE II.

LENGTH OF CANAL OPEN, 12½ MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.	
		Quantity—Tons.			Quantity.	Value.
		Up.	Down.	Total.	Tons.	Rupces.
100	1. Grain ...	279	20½	299½	14,620	14,620
1	2. Cotton ...	1	.....	1	300	300
19	3. Oilseeds ...	.....	80	80	8,558	8,558
3	4. Salt ...	.....	15	15	2,105	2,105
10	5. Piece-goods ...	.....	17½	17½	4,910	4,910
.....	6. Metal ...	.....	.....	.....	.....	.....
56	7. Building materials ...	.....	508½	508½	2,405	1,430
20	8. Miscellaneous ...	.....	18½	18½	2,356	2,356
.....	9. Fuel ...	.....	.....	.....	.....	.....
7 rafts.	10. Timber ...	.....	322 No.	322 No.	966	966
25 "	11. Bamboos ...	.....	10,950 "	10,950 "	328	328
209 & 32 rafts.	12. Total ...	273	600 & 11,272 No.	903 & 11,272 No.	429½ & 11,272 No.	35,573
307 & 25 rafts	13. Total of same month last year ..	413½	678	1,091½ & 9,910 No.	342 & 9,910 No.	26,764
		Up.	Down.	Total.		
14.	Total number of boats plying cargo ... No.	99	110	209	Total tollage of month—24+25+26 ...	
15.	Total number of boats plying passenger ... No.	.....	2	2	395 3	
15½.	Total number of empty boats ... No.	93	67	160	Total tollage of same month last year ...	
16.	Total registered tonnage, cargo ... Tons.	546	1,320	1,866	390 5	
17.	Total registered tonnage, passenger ... Tons.	.....	4	4	Memorandum of Tollage.	
18.	Ton-mileage ...	12,857	17,540	30,397	Rs. A.	
19.	Estimated value of cargo Rs.	22,757	12,497	35,254	1. Balance not recovered on the 1st of the month ...	
20.	Number of passengers ...	57	78	135	3 0	
21.	Rafts, bamboo ... No.	.....	10,950	10,950	2. Tollage per month ...	
22.	Do., Timber ...	.....	322	322	395 3	
23.	Estimated value of rafts ...	.....	1,294	1,294	3. Total ...	
24.	Tollage on boats Rs.	130-6-3	242-8-9	372-13-0	398 8	
25.	Compounded tollage on boats ... Rs.	.....	.....	.....	4. Amount credited in the accounts of the month ...	
26.	Tollage on rafts ...	.....	22-6-3	22-6-3	397 4	
27.	Total tollage on boats per ton-mile ...	.....	.....	0-0-2½	5. Balance due at the end of the month ...	
28.	Total tollage on rafts per 100 cubic feet ...	.....	.....	0-3-2	15	

## HIGH LEVEL CANAL, RANGE III.

LENGTH OF CANAL OPEN, 19 MILES.

Number of boats or rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		Tolls.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupies.	Tons.	
48	1. Grain ...	123½	2	125½	6,807	125½	6,807
.....	2. Cotton ...	.....	8½	3½	321	3½	321
1	3. Oilseeds ...	.....	2	11	1,276	11	1,276
4	4. Salt ...	9	.....	.....	.....	.....	.....
.....	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
.....	6. Metal ...	.....	.....	.....	.....	.....	.....
5	7. Building materials ...	.....	46½	46½	7	.....	.....
3	8. Miscellaneous ...	.....	10	10	1,740	10	1,740
.....	9. Fuel ...	.....	.....	.....	.....	.....	.....
10 rafts	10. Timber ...	.....	86 No.	86 No.	53	86 No.	53
.....	11. Bamboos ...	.....	.....	.....	.....	.....	.....
61 & 9 rafts.	12. Total ...	132½	64 & 86 No.	196½ & 86 No.	10,204	150 & 86 No.	10,197
126	13. Total of same month last year	193½	320½	514	8,825	135	8,984
		Up.	Down.	Total.			Rs. A. P.
4.	Total number of boats plying cargo No.	50	11	61	Total tollage of month— 24 + 25 + 26 ...		85 14 9
5.	Total number of boats plying passenger No.	.....	.....	.....	Total tollage of same month last year ...		165 2 3
5½.	Total number of empty boats No.	13	43	56			
8.	Total registered tonnage, cargo Tons	265	128	393	Memorandum of Tollage.		
Total registered tonnage, - passenger Tons		.....	.....	.....			Rs. A. P.
Ton-mileage ...		3,840	2,470	6,316	1. Balance not recovered on the 1st of the month ...		.....
Estimated value of cargo Ra.		7,677	2,474	10,151	2. Tollage per month ...		85 14 9
Number of passengers ...		56	74	130	3. Total ...		85 14 9
Rafts, bamboos c. ft.		.....	.....	.....	4. Amount credited in the accounts of the month ...		85 14 9
Do., timber No.		.....	86	86	5. Balance due at the end of the month ...		.....
Estimated value of rafts ...		.....	53	53			
Tollage on boats Ra.		48-6-9	34-0-6	82-7-3			
Compounded tollage on boats Ra.		.....	.....	.....			
Tollage on rafts ...		.....	3-7-6	3-7-6			
Total tollage on boats per ton-mile ...		.....	.....	0-0-2 5			
Total tollage on rafts per 100 cubic feet ...		.....	.....	4-0-0			

## SOUTH-WESTERN CIRCLE.

## MIDNAPORE CANAL.

LENGTH OF CANAL OPEN, 53 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
1,104	1. Grain ...	7,009	453	8,362	2,37,552	8,362	3,37,362	
20	2. Cotton .....	61	92	153	15,950	153	15,950	
92	3. Oilseeds ...	873	873	873	76,680	873	76,680	
4	4. Salt .....	4	4	8	14,350	8	14,350	
3	5. Piece-goods ...	3	8	11	4,185	11	5,185	
15	6. Metal .....	40	17	57	125	57	125	
374	7. Building materials	817	449	1,266	2,13,971	1,266	2,13,971	
19	8. Miscellaneous ...	44	131	175	1,509	175	1,509	
46 rafts	9. Fuel ...	6,054 c. ft.	253 c. ft.	6,307 c. ft.	4,002	6,307 c. ft.	4,002	
8 "	10. Timber ...	1,900 "	250 "	2,150 "	183	2,150 "	183	
1,631 & 54 rafts.	11. Banaboos ...	8,878 & 7,954 c. ft.	2,027 & 503 c. ft.	10,905 & 8,457 c. ft.	6,68,397	10,905 & 8,457 c. ft.	6,68,397	
1,543 & 42 rafts.	12. Total of same month last year.	6,700 & 9,010 c. ft.	2,282 & 961 c. ft.	8,982 & 9,971 c. ft.	5,96,600	8,982 & 9,971 c. ft.	5,96,600	
		Up.	Down.	Total.				Rs. A. P.
14.	Total number of boats plying cargo No.	1,285	346	1,631	Total tollage of month— 21+25+26 ...			11,211 13 3
15.	Total number of boats plying passenger No.	488	566	1,054	Total tollage of same month last year ...			9,404 14 9
15½.	Total number of empty boats ... No.	569	904	1,473				
16.	Total registered tonnage, cargo Tons	17,277	4,636	21,913	Memorandum of Tollage.			
17.	Total registered tonnage, passenger ... Tons	2,599	2,559	5,158				
17½.	Total registered tonnage, empty ... Tons	2,147	3,743	5,890				
18.	Ton-milage ...	4,99,393	2,26,806	7,26,199	1. Balance not recovered on the 1st of the month ...			3,975 8 2
19.	Estimated value of cargo Rs.	4,07,062	2,57,060	6,64,122	2. Tollage per month ...			11,211 13 3
20.	Number of passengers ...	4,655	7,173	11,828	3. Total ...			15,187 5 5
21.	Rafts, bamboos c. ft.	1,900	250	2,150				
22.	Do., timber "	6,054	253	6,307				
23.	Estimated value of rafts ...	3,618	657	4,275				
24.	Tollage on boats Rs.	7,423-5-6	3,696-2-9	11,119-8-3				
25.	Compounded tollage on boats ... Rs.	.....	.....	.....				
26.	Tollage on rafts " "	83-2-9	9-2-3	92-5-0	4. Amount paid into treasury during the month ...			10,868 11 3
27.	Total tollage on boats per ton-mile Pie	.....	.....	0-0-2-9	5. Balance due at the end of the month ...			4,318 43 1
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	1-1-8				

## HIDGELLER TIDAL CANAL.

LENGTH OF CANAL OPEN, 29 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupces.	Tons.	Rupces.	
	1. Grain ...							Canal was closed for silt excavation.
	2. Cotton ...							
	3. Oilseeds ...							
	4. Salt ...							
	5. Piece-goods ...							
	6. Metal ...							
	7. Building materials ...							
	8. Miscellaneous ...							
	9. Fuel ...							
	10. Timber ...							
	11. Bamboos ...							
	12. Total ...							
1,274 & 18 rafts.	13. Total of same month last year.	3,142 & 939 c.ft.	553 & 1,016 c.ft.	3,695 & 1,955 c.ft.	1,76,711	3,577 & 1,955 c.ft.	1,74,946	
14. Total number of boats plying cargo No.					Total tollage of month—24 + 25 + 26 ...		Rs. A. P. ....	
15. Total number of boats plying passenger No.					Total tollage of same month last year ..		3,031 7 9	
16. Total registered tonnage, cargo ...					Memorandum of Tollage.			
17. Total registered tonnage, passenger ...								
18. Ton-mileage ...					Rs. A. P.			
19. Estimated value of cargo ...					1. Balance not recovered on the 1st of the month ... 20 6 3			
20. Number of passengers ...					2. Tollage per month ... ..			
21. Rafts, bamboos c. ft.					3. Total ... 20 6 3			
22. Do., bullahs "					4. Amount paid into treasury during the month ... 20 6 3			
23. Estimated value of rafts ...					5. Balance due at the end of the month ... ..			
24. Tollage on boats Rs.								
25. Compounded tollage on boats ... Rs.								
26. Tollage on rafts "								
27. Total tollage on boats per ton-mile ...								
28. Total tollage on rafts per 100 cubic feet ...								

**SONE CIRCLE.**  
**PATNA CANAL SYSTEM.**  
**LENGTH OF CANAL OPEN, 80½ MILES.**

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REVENUE.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupces.	Tons.	
1	1. Grain ...	7	2	9	535	9	535
.....	2. Cotton ...	.....	.....	.....	.....	.....	.....
2	3. Oilseeds ...	14	.....	14	1,433	14	1,433
5	4. Salt ...	65	2	67	5,706	67	5,706
32	5. Piece-goods ...	187	23	210	27,785	209	27,560
.....	6. Metal ...	6	3	9	1,714	9	1,714
16	7. Building materials ...	.....	190	190	1,133	177	1,115
47	8. Miscellaneous ...	133	251	384	68,794	309	65,809
1	9. Fuel { boats	1	.....	1	5	.....	.....
	rafts	.....	14	14	340	14	340
3	10. Timber { boats	11	.....	11	350	10	250
	rafts	.....	957	957	4,195	957	4,195
6	11. Bamboos { boats	50	.....	50	1,495	50	1,495
	rafts	66	1,386	1,452	23,635	1,452	23,635
113	12. Total ...	510	2,828	3,368	1,37,120	3,277	1,33,787
146	13. Total of same month last year	327	1,910	2,237	1,28,309	1,810	1,27,026
		Up.	Down.	Total.			Rs. A.
14.	Total number of boats plying cargo No.	58	65	113	Total tollage of month— 24 + 25 + 26 ...		2,221 9
15.	Total number of boats plying passenger No.	4	5	9			
15½.	Total number of empty boats No.	56	19	75	Total tollage of same month last year ...		1,596 1
16.	Total registered tonnage, cargo Tons	813	767	1,580			
17.	Total registered tonnage, passenger Tons	108	112	220			
17½.	Total registered tonnage, empty boats Tons	235	84	319			
					<i>Memorandum of Tollage.</i>		
18.	Ton-mileage ...	48,973	2,03,600	2,52,582			Rs. A.
19.	Estimated value of cargo ...	38,761	70,189	1,08,950	1. Balance not recovered on the 1st of the month ...		819 1½
20.	Number of passengers No.	305½	250½	556	2. Tollage per month ...		2,221 9
21.	Rafts, bamboos c. ft.	9,850	2,07,897	2,17,747			
22.	Do., bullocks "	.....	72,839	72,839			
23.	Estimated value of rafts Rs.	1,105	27,065	28,170	3. Total ...		3,041 7½
24.	Tollage on boats "	3-1-8-6	475-15-9	857-8-3			
25.	Compounded tollage on boats Rs.	75-0-0	75-0-0	150-0-0			
26.	Tollage on rafts "	3-5-9	1,210-11-0	1,214-0-9	4. Amount credited in the accounts of the month ...		2,692 1½
27.	Total tollage on boats per ton-mile ...	.....	.....	0-0-0-76			
28.	Total tollage on rafts per 100 cubic feet ...	.....	.....	0-6-8	5. Balance due at the end of the month ...		405 3½



## ARRAH CANAL SYSTEM.

LENGTH OF CANAL OPEN, 65 MILES.

Number of boats or Rafts.	Description.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity-Tons.		Value.	Quantity.	Value.	
		Up.	Down.	Total.	Tons.	Rupces.	
7	1. Grain ...	94	4	98	5,485	98	5,485
.....	2. Cotton ...	1	.....	1	894	1	894
5	3. Oilseeds ...	.....	27	27	2,850	27	2,850
15	4. Salt ...	218	.....	218	16,230	218	16,230
5	5. Piece-goods ...	78	1	79	48,309	79	48,309
9	6. Metal ...	72	3	75	10,710	5	585
5	7. Building materials ...	7	29	36	126	15	56
70	8. Miscellaneous ...	63	356	419	13,773	192	13,482
17	9. Fuel ...	202	18	220	1,314	61	857
2	10. Timber ...	.....	7	7	288	7	288
Rafts {	11. Firewood ...	.....	231	231	725	231	725
	Bullabs ...	.....	656	656	3,114	656	3,114
	Bamboos ...	.....	389	389	4,070	389	4,070
135	12. Total ...	735	1,721	2,456	1,07,888	1,979	96,945
176	13. Total of same month last year	535	1,414	1,949	1,23,171	1,711	1,21,150
		Up	Down.	Total.			Rs. A. P.
14.	Total number of boats plying cargo No.	64	71	135	Total tollage of month— 24 + 25 + 26 ...		1,108 8 0
15	Total number of boats plying passenger No.	2	1	3	Total tollage of same month last year ...		1,156 2 3
154	Total number of empty boats	24	14	38			
16.	Total registered tonnage, cargo Tons	981	706	1,687	Memorandum of Tollage.		
17.	Total registered tonnage, passenger Tons	66	50	116			
174	Total registered tonnage, empty Tons	62	51	113			
18.	Ton-mileage ...	53,128	36,232	89,360	1. Balance not recovered on the 1st of the month ...		196 11 3
19.	Estimated value of cargo Rs.	85,195	14,784	99,979	2. Tollage per month ...		1,108 8 0
20.	Number of passengers ...	834	814	1,648	3. Total ...		1,305 3 3
21.	Rafts, bamboos c. ft.	.....	58,470	58,470	4. Amount credited in the accounts of the month ...		1,088 8 3
22.	Do., bullabs ..	.....	49,244	49,244			
22½.	Do., firewood ..	.....	17,333	17,333			
23.	Estimated value of rafts Rs.	.....	7,909	7,909	5. Balance due at the end of the month ...		216 11 0
24.	Tollage on boats ..	284-13-6	191-3-0	476-0-6			
25.	Compounded tollage on boats Rs.	164-0-0	164-0-0	328-0-0			
26.	Tollage on rafts ..	.....	304-7-6	304-7-6			
27.	Total tollage on boats per ton-mile ...	.....	.....	1-85 pice			
28	Total tollage on rafts per 100 cubic feet ...	.....	.....	0-3-10			